Bolton Council

The Impact of COVID-19 on the health and wellbeing of Bolton residents

Director of Public Health's Annual Report 2020/21

Technical analyses

December 2021

Contents

Editorial team:

Helen Lowey, Director of Public Health

Lynn Donkin, Assistant Director/Consultant in Public Health

Shan Wilkinson, Public Health Intelligence Specialist

Lucy Heaton, Research and Intelligence Specialist

Chris Kirk, Data and Intelligence Analyst

Lucy Vanes, Specialty Registrar in Public Health

Aidan Flatt, Specialty Registrar in Public Health

Foreword

The year of 2020/21 has been unprecedented for Bolton. We have faced our biggest ever challenge in the form of the Covid-19 pandemic, which has hit Bolton harder than most. The whole of Bolton has been affected by the pandemic; people have been directly impacted by Covid-19 with loved ones falling ill, and sadly many people dying with Covid-19, as well as the indirect impacts on our lives and economy due to the management of Covid-19 and throughout which, Bolton has often been under extra levels of restrictions compared with other areas of the country due to our high Covid-19 rates and higher mortality (death) rates.

However, the impact has not been felt equally across the country nor our borough. Covid-19, and the management of Covid-19, follows the lines of existing health inequalities: impacting most on our more deprived communities, where we have seen higher rates of infections, hospitalisations and, sadly, deaths. The reason for this is a complex mixture of factors, which we refer to as the social determinants of health; the aspects of our lives which affect our health, some of which are influenced by wider societal factors, including education, employment, finances, housing, transport and more.

This report serves to look at the data on inequalities in Bolton in relation to Covid-19: including infections, hospitalisations, deaths, vaccine uptake, and the impact of measures taken to mitigate the impact of Covid-19. This report examines inequalities experienced by these groups and social determinants of health which are likely to affect figures.

However, it is also important to celebrate our communities in relation to the response to Covid-19 in Bolton: with a ‘humanitarian support hub’ up and running in a matter of days when the first ‘stay at home’ restrictions was announced; strong and effective partnership working with our local community organisations; successful lobbying on behalf of our community to help more people access self-isolation grants; the social movement created by our communities – to help stop the spread of the virus. The whole borough pulled together to face this monumental challenge, which enabled us all to work together to find solutions. We hope to continue, and build upon, these positive working relationships into the future.

Dr Helen Lowey
Director of Public Health

Introduction

In December 2019 a cluster of cases of pneumonia with unknown cause were reported in the city of Wuhan, China. In January 2020 a new coronavirus was identified by the World Health Organization (WHO), and reports of cases began coming in from other countries. The WHO named this 'Covid-19' in February 2020. By March 2020, thousands of cases were identified internationally and, the WHO made the assessment that Covid-19 was to be classified as a pandemic.[1] Bolton had its first confirmed case of Covid-19 on 3 March 2020. By the 23 March 2020, the UK entered its first national 'lockdown', i.e., national 'stay at home' restrictions as cases were rising and hospital admissions due to severe Covid-19 illness sharply increased.[2] By the 1 August 2021, the UK recorded had 5.9 million cases[3] of Covid-19 and 156,000 deaths[4] and scientists had developed a new vaccine effective at protecting against serious illness and roll out was progressing quickly.

By the end of July 2021, there were more than 40,000 recorded cases in Bolton and sadly, 770 Bolton residents have died. This analyses presents our current understanding of how the infection has impacted on the health and wellbeing of Bolton residents, looking at patterns and trends of recorded infections and deaths between different communities and age groups and considering the emerging data on indirect impacts on health and wellbeing of living under extended restrictions and experiencing pandemic-related disruption to our daily lives.

[1] WHO. (2020). *Archived: WHO Timeline - COVID-19*. https://bit.ly/3D0Qqou
[2] Institute for Government (2021). *Timeline of UK government lockdowns March 2020 to June 2021*. https://bit.ly/3iUO6qM
[3] UK Government. (2021). *Coronavirus (Covid-19) in the UK dashboard*. Cases by specimen date https://bit.ly/3stJXO0
[4] UK Government. (2021). *Coronavirus (Covid-19) in the UK dashboard*. Deaths with COVID-19 on the death certificate by date of death. https://bit.ly/37Tm6gY

Chapter 1. The unequal health impact of the pandemic on Bolton residents

Overview

Since spring 2020, Bolton has experienced more Covid ‘waves’ than seen in England as a whole, with several of the Bolton waves also lasting for a longer period of time. During the summer and autumn of 2020, this resulted in Bolton residents seeing frequently changes to restriction, and which were often higher levels of restrictions than in please elsewhere in England.

Bolton residents have experienced greater risk of exposure to infection, and the infection has not spread evenly among the Bolton population. Patterns of social mixing, household composition, nature of employment such as frontline occupations, and occupations that can’t be done from home, are amongst a range of factors that has placed Bolton residents at higher risk of exposure to infection. Both the youngest and oldest age groups have been hit hardest at different times, together with people living in our most deprived areas, and those from minority ethnic backgrounds.

Furthermore Bolton has a high proportion of people who are vulnerable to serious complications from Covid-19 infection. People from some groups are at higher risk of suffering more serious illness and complications from Covid-19 infection. Increasing age is strongly associated with an increasing risk of serious illness and death, as is the presence of certain underlying health conditions. The association between socioeconomic disadvantage and health is well established and people living in more disadvantaged communities suffer worse health than those from more affluent communities. Covid-19 is no exception.

The most vulnerable in our communities include care home residents, and in the initial wave in spring 2020, care homes residents were particularly hard hit.

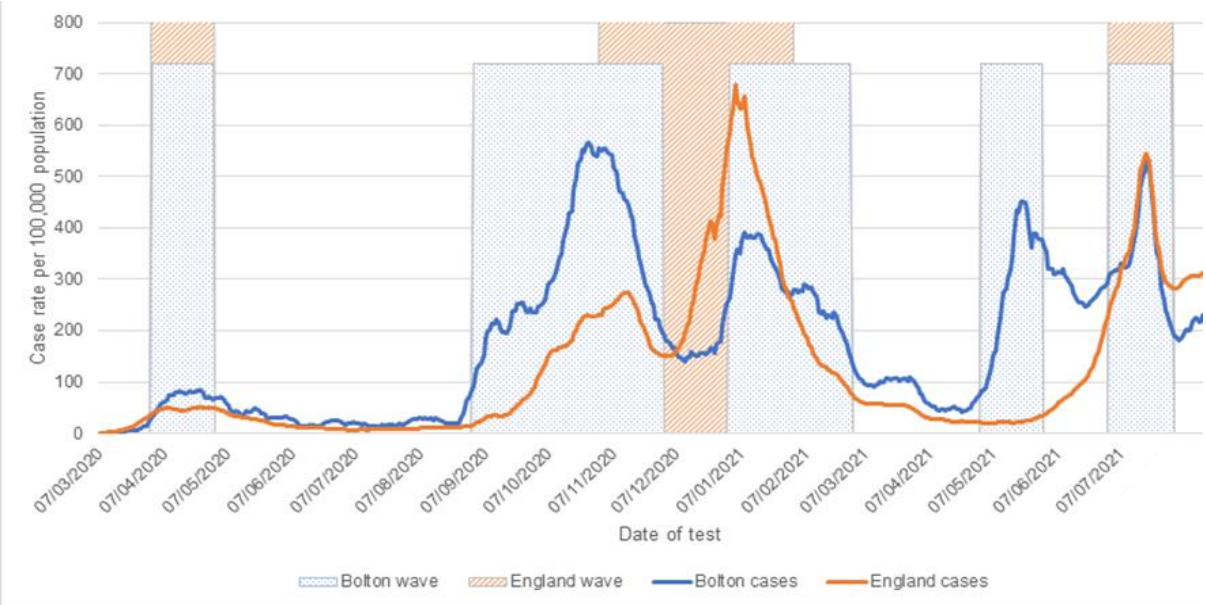
Males, people from non-White ethnic groups, and people with a disability were among those with higher risk of death from Covid. Prior to the pandemic, Bolton had a significantly lower life expectancy than the average in England, with a further inequality gap between the most and least deprived areas within the borough. Bolton is similar to the wider

Greater Manchester conurbation in terms of its demographic make-up of occupations, employment statuses, levels of deprivation, working and living conditions, ethnicity and physical interconnectedness, and these likely account for the high levels of Covid-19 mortality seen in Bolton and in the city region. The recent fall in life expectancy, covering the initial Covid period, in female and male life expectancy at birth, is the sharpest decrease in life expectancy Bolton has seen within a single time period, in the last 20 years.

Covid-19 infection

As of the start of August 2021, nearly six million positive cases of Covid-19 had been recorded in the UK. In Bolton, there had been 42,511[5] reported cases of Covid-19. Up until 31st July 2021, Bolton residents had taken 533,354 lab based Covid tests, and 566,494 rapid lateral flow tests[6]. Figure 1 outlines the positive rates of Covid-19 per 100,000 of the population for both Bolton (blue lines) and England (orange lines). It also indicates the number of 'waves' each area has had and for how long each wave lasted. It is clear from Figure 1 that Bolton has had a total of five 'waves' whereas England has had three; and that two of those 'waves' in Bolton were for a longer time period than compared with England.

Figure 1. Bolton case rates over time compared with England rates (March 2020 to July 2021)



[5] UK Government. (2021). *Coronavirus (COVID-19) in the UK dashboard – Cases in Bolton*. 14/9/21 https://bit.ly/3k77kdo
[6] UK Government. (2021). *Coronavirus (Covid-19) in the UK dashboard*. Testing in Bolton https://bit.ly/3dGLdGG

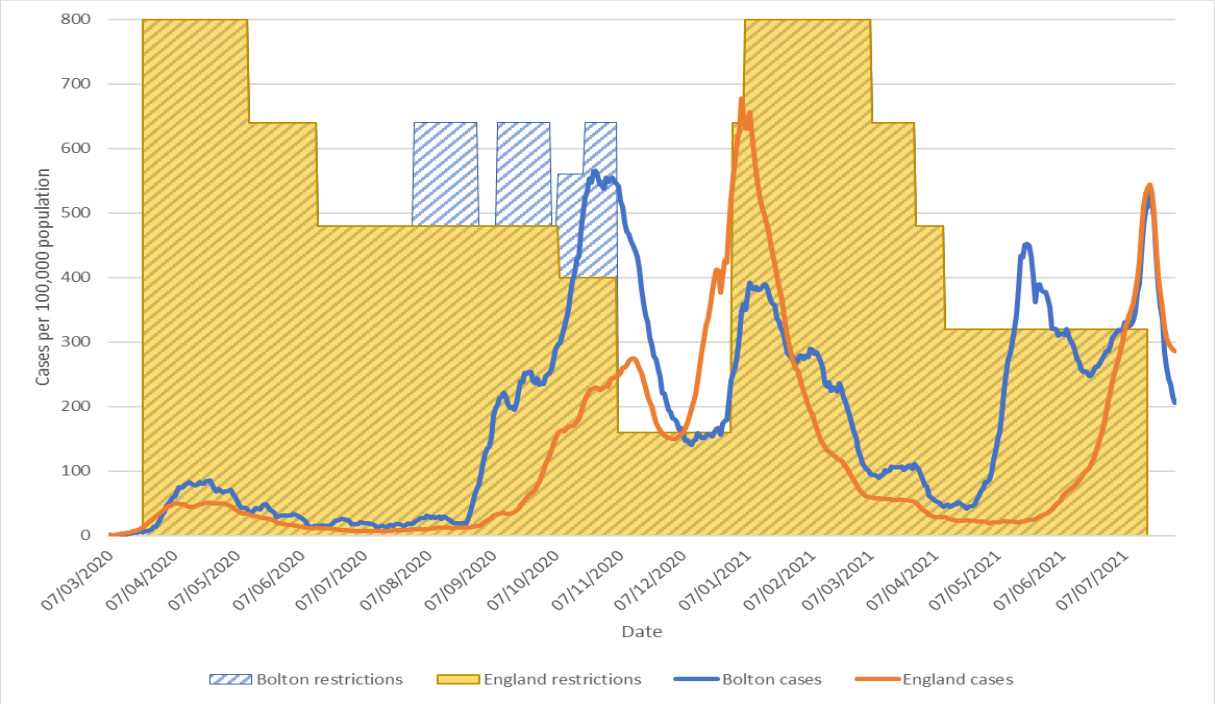
In the first wave (Spring 2020), when only people who were very ill/needed to be hospitalised were tested, Bolton's peak number of daily cases was recorded at 51 (on 22/4/2020). Daily cases in Bolton reached 296 (on 2/11/2020) at the peak of Bolton's second wave during autumn 2020[7], by which time we had community testing in place. Levels of circulating infections leading to positive test results have been influenced by national, regional, tiered and local restrictions, adherence to public health measures (non-pharmaceutical interventions), individuals' immunity, and the Covid-19 vaccination rollout. It is important to note that testing capacity and promotion of testing people with no symptoms (asymptomatic testing) has further influenced people's decisions to seek testing. [8]

In line with the rest of the UK, Bolton's case rates significantly improved following government's first national restrictions where everyone must 'stay at home', which began on Monday 23 March 2020. However, as restrictions eased from 13 May 2020, with further easings on 15 June 2020, and initiatives such as 'eat out to help out' were implemented and the 'work from home' message ended, the numbers in Greater Manchester began to increase again. On 31 July 2020 the city region was placed under *'increased restrictions'* (on that date, Bolton's 7-day case rate was 19.8/100,000 compared with an England rate on 31 July of 8.9/100,000). The national easing on 15 August was not applied to Greater Manchester,[9] but local relaxations in the measures were seen in some boroughs and wards from the end of August. [10] Bolton's measures remained consistent across the borough. A rapid rise in case rates in Bolton at the end of August saw it placed under greater restrictions from 9 September to 3 October 2020, which involved certain business and venue closures and restriction of hospitality to takeaway only.[11] A national tiered system was announced on 12 October[12] and Greater Manchester was initially placed in Tier 2 before being escalated to Tier 3 on 21 October before national blanket restrictions were again introduced on 5 November.[13] From there until the easing of all restrictions in England on 19 July 2021, Bolton's restrictions were the same as those for England as a whole. Schools, colleges and universities returned to face-to-face learning in September

[7] UK Government. (2021). *Coronavirus (COVID-19) in the UK dashboard – Cases in Bolton*. https://bit.ly/
[8] Knock ES, Whittles LK, Lees JA, Perez-Guzman PN, Verity R, et al. (2021). Key epidemiological drivers and impact of interventions in the 2020 SARS-CoV-2 epidemic in England. *Science Translational Medicine, 13(602)*. https://bit.ly/3BxTYg8
[9] Otter S. (2020). These are all the rules in Greater Manchester as local lockdown restrictions remain. *Manchester Evening News 14/8/20*. https://bit.ly/3lna85s
[10] Department of Health and Social Care. (2020). *Press release: More targeted action in local areas to curb the spread of coronavirus*. https://bit.ly/3tAMZQV
[11] Department of Health and Social Care. (2020). *Guidance: Bolton: local restrictions*. https://bit.ly/390nFtZ
[12] Prime Minister's Office. (2020). *Press release: Prime Minister announces new local COVID Alert Levels*. https://bit.ly/3G5erLE
[13] Bolton Council. (2021). *Bolton new COVID-19 cases timeline, by testing pillar*. https://tabsoft.co/3t5yFiX

2020, with the public health measures in place, i.e. bubbles, face coverings, one way systems etc.

Figure 2. Covid restrictions for Bolton and England (March 2020- July 2021)



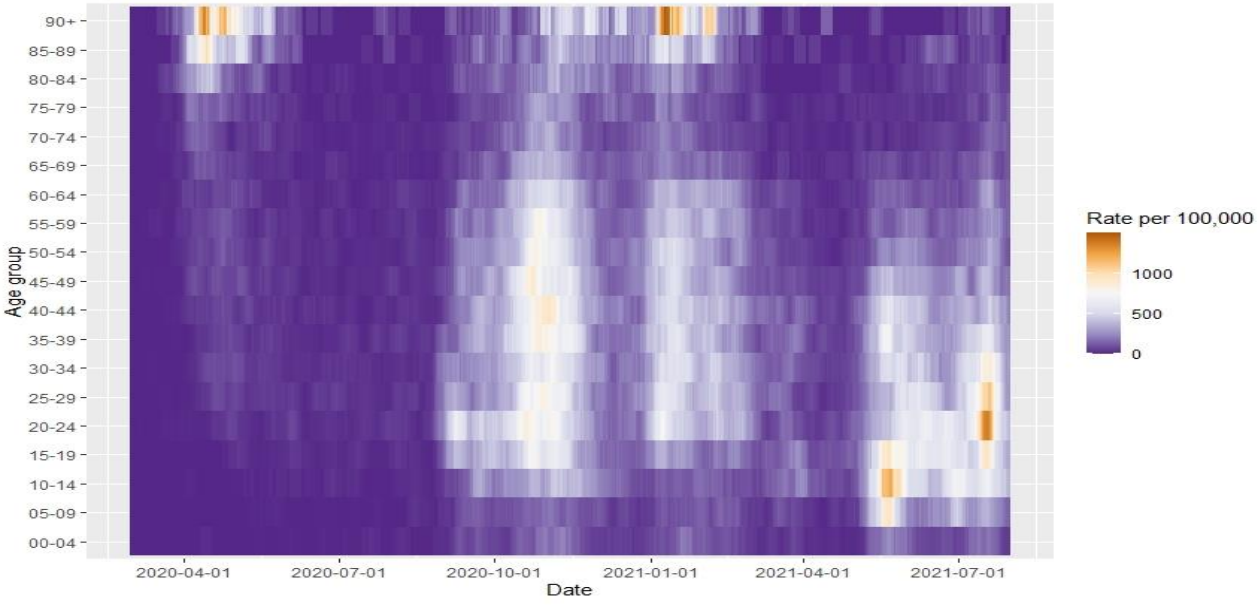
During autumn and early winter 2020, Bolton saw some of the highest infection rates in the country, with the majority of cases being reported in people aged under 50. [14] Restrictions and non-pharmaceutical interventions once again improved case rates, but in May 2021 Bolton made headlines when it reported the highest levels in the country of the Delta variant (a variant of coronavirus with increased transmissibility) at a time when the country as a whole was progressing down the government's Roadmap and easing restrictions. Surge testing, enhanced tracing, surge vaccinations and enhanced isolation packages saw case rates quickly decline in the following month. [15] Figure 1 shows Bolton's case rate over time compared to that of England as a whole.

Infections have not been evenly spread among the Bolton population. During the first wave, age was the biggest risk factor, and case rates increased as age increased. However, by the last wave (May 2021), the younger population, (0-24 years) was the biggest age group to have the highest case rates (Figure 3), this mirrored the national

[14] Williams J. (2020). Young people account for Bolton's huge spike in Covid cases - but officials don't know exactly what's going on. *Manchester Evening News, 4/9/2021*. https://bit.ly/3BvKmCB
[15] Reed J, England R. (2021). Covid: Things are looking up in Bolton, eye of the variant storm. *BBC*. https://bbc.in/2V67Kap

trend.[16] During March 2020 to July 2021, there were over 7,000 recorded positive cases of Covid-19 in 0–18 year olds in Bolton, with the 11-18 year olds being the largest age group (Figure 3). With regards to deprivation, over 62% of cases were residents within the 30% most deprived areas, as identified by Index of Multiple Deprivation (IMD) 2019.

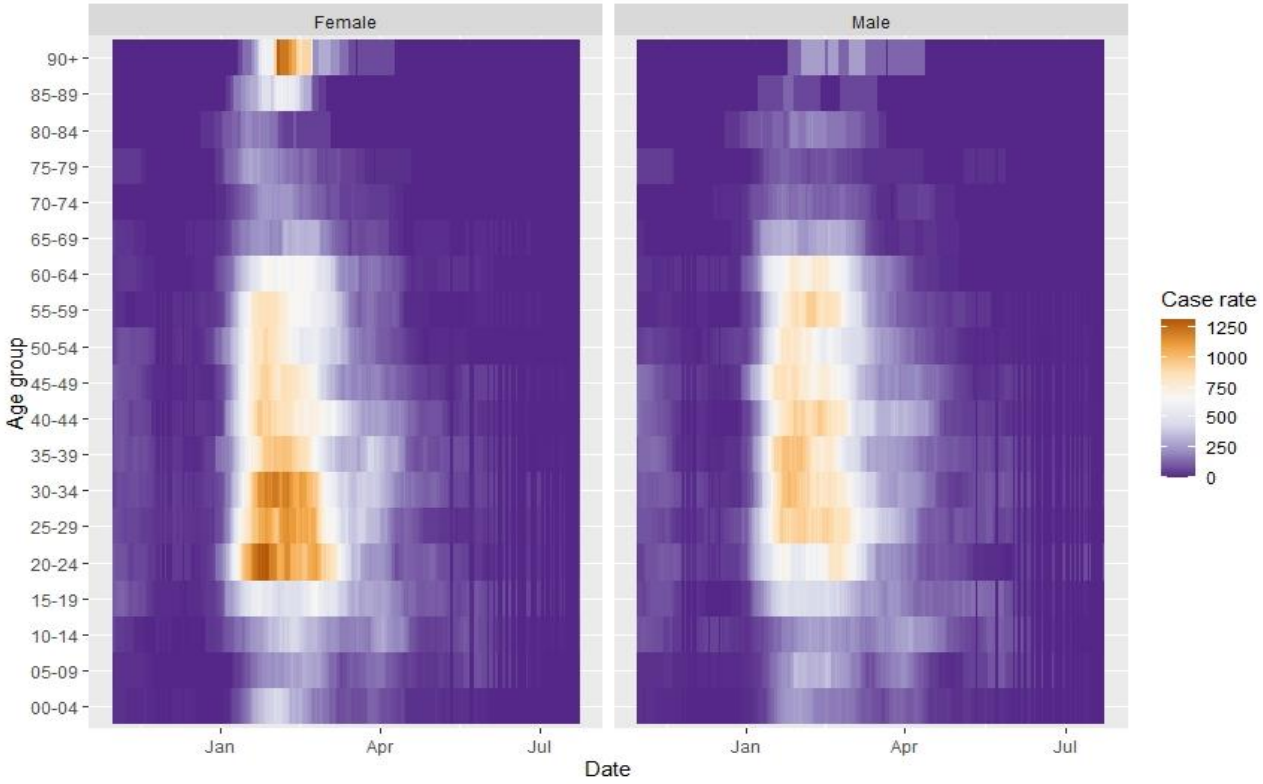
Figure 3. Bolton Covid-19 case rate (per 100,000 population) by age (1/3/2020-31/7/2021)[17]



Case rates have varied not just by age, but also by gender (Figure 4). During the January peak this difference was most noted, with case rates higher in females aged 20-34 and 90+ (although absolute numbers will be small for the very oldest age group).

[16] UK Government. (2021). *Coronavirus (COVID-19) in the UK dashboard – Cases in Bolton*. https://bit.ly/3Ce4A4r
[17] UK Government. (2021). *Coronavirus (Covd-19) in the UK dashboard "newCasesBySpecimenDateAgeDemographics"*. https://bit.ly/3GpCPaX

Figure 4. Bolton 21 day rolling case rate per 100,000 population by gender(1/11/2020-31/7/21)

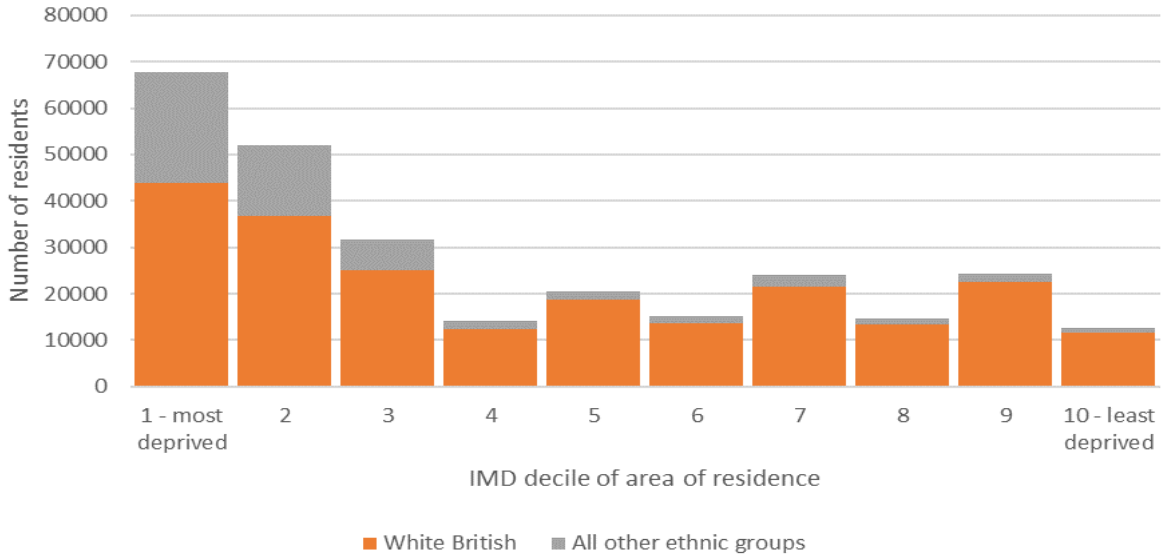


Minority ethnic population groups in the UK have higher risk of testing positive for Covid-19 compared with the White population.[18] Several contributory factors are thought to account for this, which would also be expected to be an issue in Bolton, including those in minority ethnic population groups being more likely to hold public-facing occupations (often lower wage and less likely to be able to work from home), live in multi-generational housing, and live in urban areas where transmission rates are higher. [19] In Bolton there are a large number of areas with higher proportions of minority ethnic groups compared to the rest of the UK); there are higher than average proportion of individuals from Asian Indian and Asian Pakistani backgrounds living in Bolton (10% compared to 6% in England as a whole).[20] Overall, 21% of the Bolton population are from a non White British background, compared with 20% of the English population[21] however, at MSOA (middle super output area; a medium sized administrative geography), the Bolton average is 15% from a non-White British background, compared to 9% in England as a whole;[22] and people from a non-White British ethnic group are more likely to live in an area of deprivation. Areas of Bolton falling into the 10% of most deprived areas nationally, 35% of residents reported a

[18] Mathur R, Rentsch CT, Morton CE, Hulme WJ, Schultze A, MacKenna B, et al. Ethnic differences in SARS-CoV-2 infection and COVID-19-related hospitalisation, intensive care unit admission, and death in 17 million adults in England: an observational cohort study using the OpenSAFELY platform. *The Lancet, 397(10286)*, p1711-1724 https://bit.ly/3gbJUl0
[19] Raleigh V, Holmes J. (2021). *The health of people from ethnic minority groups in England*. The Kings Fund. https://bit.ly/3mRJ019
[20] Bolton JSNA: Ethnicity. https://bit.ly/3zErWPM
[21] Nomis (2011). *QS211EW - Ethnic group (detailed)*. https://bit.ly/3ItNKlP
[22] Bolton Council. (2021). *Bolton Neighbourhood Information explorer*. https://bit.ly/3GnGxSw

non-White British background, compared with 7% among the areas of Bolton within the 10% least deprived nationally (Figure 5).

Figure 5. Ethnicity by deprivation of residence in Bolton [23],[24]



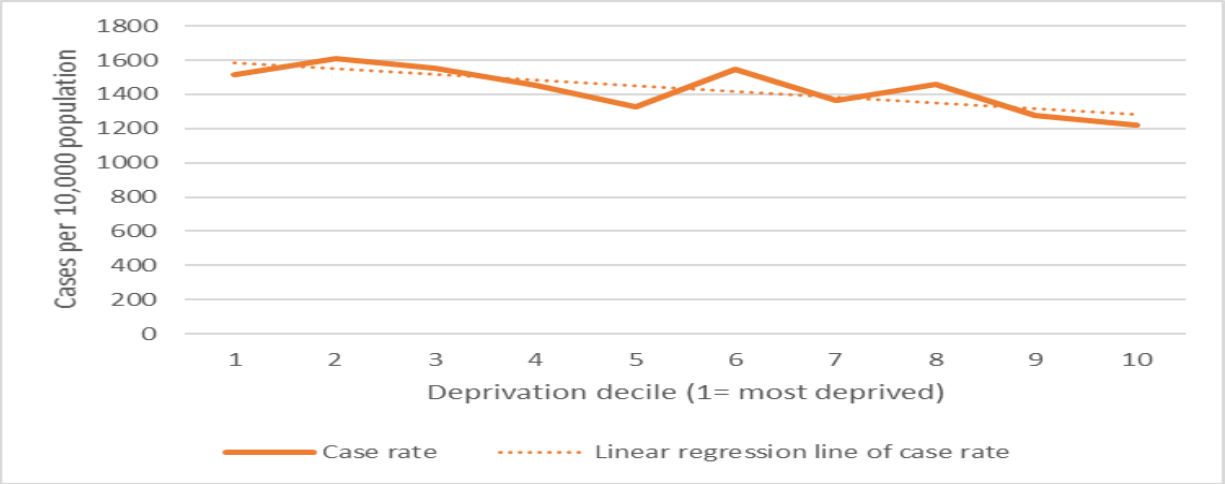
Across all ethnic groups nationally, deprivation is a key factor in inequalities in infection rates from Covid-19[25], with the number of cases and diagnoses highest in the most deprived quintile. Geography likely plays a role in this[26], but also occupational risk of exposure is higher in working age adults from more deprived areas.[26] This increase in odds of a positive test with increasing deprivation has also been shown to be the case when adjusted for urban living, household size and smoking.[26] People living in more deprived areas were already experiencing health inequalities before the pandemic, such as having lower life expectancies,[27] which is an overall indicator of population health. With Bolton's relatively high levels of deprivation and diverse population, we can expect to see several sources of disadvantage acting independently, and together to impact on the health of our population.

In Bolton, 26% (73,601/ 288,248, mid 2020 population estimates) of the population live in an area that is among the 10% most deprived nationally, while 56% (n=162,267) of the population live in an area that is among the 30% most deprived nationally.[28],[29] Over the

[23] MHCLG. (2019). English Indices of Deprivation. https://bit.ly/31brbkK
[24] Nomis. (2012). QS201EW - Ethnic group. https://bit.ly/32NEn00
[25] HM Government. (2021). *Third quarterly report on progress to address COVID-19 health inequalities*. https://bit.ly/3iYA3Rj
[26] de Lusignan S, Dorward J, Correa A, Jones N, Akinyemi O, et al. (2020). Risk factors for SARS-CoV-2 among patients in the Oxford Royal College of General Practitioners Research and Surveillance Centre primary care network: a cross-sectional study. *The Lancet Infectious Diseases, 20 (9)*, p1034-1042. https://bit.ly/3gSfFQi
[27] Public Health England. (2021). *Health Inequalities Dashboard*. https://bit.ly/30Gq4cx
[28] Bolton JSNA: *Equality characteristics*. https://bit.ly/3kLFsef
[29] ONS. (2021). *Lower layer Super Output Area population estimates (National Statistics): dataset.* https://bit.ly/3ozx7gw

course of the whole pandemic, the highest case rates were seen amongst residents living in areas within the most deprived areas nationally (Figure 6). The highest case rates are seen among residents living in decile 2 at 1,611/100,000, with the lowest amongst those living in the least deprived decile, decile 10 at 1,218/100,000. Therefore, in Bolton, living in deprivation increased a person's risk of testing positive for Covid-19.

Figure 6. Bolton case rates by deprivation decile (to 13/9/21)



Covid-19 morbidity

The main symptoms of Covid-19 are a new continuous cough, a high temperature and changes or loss in taste or smell.[30] But symptoms and/ or degree of illness (also referred to as 'morbidity') caused by Covid-19 differs widely between individuals, with some experiencing severe disease requiring hospital admission, to others experiencing no symptoms or only mild illness[31], and others experiencing any of the wider spectrum of symptoms also associated with Covid-19, especially with new variants.[32] For some people, their symptoms persist beyond 12 weeks from initial infection and are described as 'Long Covid'.[33] The impact that Long Covid has on an individual's quality of life and ability to work is emerging and whilst the full impact is not yet known, there are significant effects for a growing number of people. According to an ONS report[34] based on a nationally-representative sample of the UK community population, they estimated that around 1 in 5 respondents testing positive for Covid-19 exhibit symptoms for a period of 5 weeks or longer and around 1 in 10 respondents testing positive for Covid-19 exhibit symptoms for a period of 12 weeks or longer. Taking into consideration the fact that Bolton had 42,511

[30] The NHS website for England. (2021). *Main symptoms of coronavirus (COVID-19)* https://bit.ly/37V4stb
[31] Nature (2020). *What the data say about asymptomatic COVID infections*. https://go.nature.com/2VYPf8m
[32] Davisa HE, Assafa GS, McCorkella L, Weia H, Lowa RJ, Re'ema Y, Redfielda S, Austina JP, Akramia A. (2021). Characterizing long COVID in an international cohort: 7 months of symptoms and their impact. *EClinicalMedicine, 101019*. https://bit.ly/2Utv6qb
[33] The NHS website for England (2021). *Long term effects of coronavirus (long covid).* https://bit.ly/3AWdUsZ
[34] ONS (2020) The prevalence of long COVID symptoms and COVID-19 complications https://bit.ly/3GJ5at2

recorded cases of Covid-19 up to 31st July, then it is clear that a substantial proportion of residents may experience symptoms persisting after their initial infection.

Long Covid was initially a term created by patients to address key medical, epidemiological and socio-political challenges posed by diverse symptoms persisting beyond four weeks after symptom onset suggestive of coronavirus disease 2019 (Covid-19).[35] It is suggested that the term Long Covid can cover a spectrum of conditions and symptoms which can vary in severity and longevity. National Institute for Health and Care Excellence (NICE), the Scottish Intercollegiate Guidelines Network (SIGN) and the Royal College of General Practitioners (RCGP) released a guideline scope in October 2020 to define the effects of Covid-19 at various durations:[36]

- **Acute Covid-19 infection**: Signs and symptoms of Covid-19 for up to 4 weeks.
- **Ongoing symptomatic Covid-19**: Signs and symptoms of Covid-19 from 4 weeks up to 12 weeks.
- **Post-Covid-19 syndrome**: Signs and symptoms that develop during or following an infection consistent with Covid-19, continue for more than 12 weeks and are not explained by an alternative diagnosis. It usually presents with clusters of symptoms, often overlapping, which can fluctuate and change over time and can affect any system in the body.

In Bolton, 16,000 residents[37] were considered to be extremely clinically vulnerable and therefore at higher risk of severe disease and death if they contracted Covid-19; they were recommended to shield during the early parts of the pandemic. This represents 5.6% of Bolton's resident population, which is much higher when compared to 3.9% across England as a whole.

Symptomatic Covid-19 is reported to be higher in older populations compared with younger age groups.[38] However, the age group most likely to report persistence of symptoms beyond 12 weeks (Long Covid) are those aged 35-69 years.[39] Productivity in Greater Manchester lags behind the UK as a whole, and it is estimated that up to 30% of

[35] Perego E, Callard F, Stras L et al. (2020) Why the Patient-Made Term 'Long Covid' is needed [version 1; peer review: 1 approved with reservations, 1 not approved].*Wellcome Open Research* https://bit.ly/2WWsGAY
[36] NICE (2020) COVID-19 guideline scope: management of the long-term effects of COVID-19 https://bit.ly/2WPSgYw
[37] Bolton Council (2020). Extremely clinically vulnerable residents list.
[38] Kang S-J, Jung SI. (2020). Age-Related Morbidity and Mortality among Patients with COVID-19. *Infection and Chemotherapy, 52(2),* 154–164. https://bit.ly/3gUg9yq
[39] Suleman M, Sonthalia S, Webb C, Tinson A, Kane M, Bunbury S, Finch D, Bibby J. (2021). *Unequal pandemic, fairer recovery: The COVID-19 impact inquiry report*. The Health Foundation. https://bit.ly/3mSALBK

the productivity gap with the UK average could be reduced by raising participation in the workforce through addressing ill health.[40]

Long Covid has been found to affect women more than men, and those living in more deprived areas compared to those living in less deprived areas.[41] The impact of Long Covid in Bolton is likely to be higher due to the employment and economic inequalities and the burden of Long Covid in Bolton is predicted to be higher than many other areas in the UK.[42]

The rate of diagnosed Covid cases increases with age, but the age profile is markedly different among those in critical care, with the largest number of patients in critical from age groups between 50 and 70 for both males and females and only small numbers aged over 80. The overrepresentation of younger older adults in critical care does not necessarily solely reflect increased severity in this group of patients but may also reflect critical care admission criteria.[43]

Interestingly, early Covid-19 symptoms have been found to differ between different groups, with loss of smell becoming less common after the age of 60, and diarrhoea being more common in older adults, age 60+. Furthermore, early Covid-19 symptoms also vary by sex, with men reporting higher levels of shortness of breath and fatigue, and women more likely to report chest pains and persistent cough. Although these findings relate to the wild type Covid (the strain originally identified and sequenced) and alpha variant, the key findings suggest the symptoms of the Delta variant and subsequent variants will also differ across population groups.[44] It is important that research and access to treatment does not focus solely or mainly on the experience of any one group for such access to be equitable.

Research has found differences in length of morbidity from Covid-19 by sex; a significantly higher proportion of women had symptoms persisting for five weeks after infection than men; in contrast, the proportion of those requiring admission to intensive care for severe

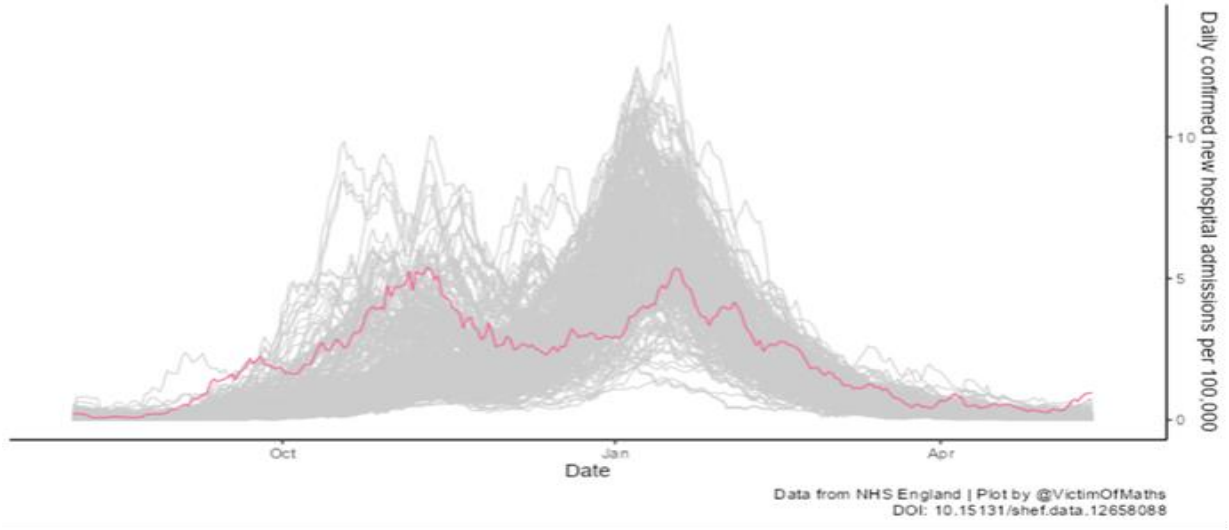
[40] GMCA (2019). Greater Manchester Independent Prosperity Review. https://bit.ly/3xaO9Ep
[41] Whitaker M, Elliott J, Chadeau-Hyam M, Riley S, Darzi A, Cooke G, Ward H, Elliott P. (2021). *Persistent symptoms following SARS-CoV-2 infection in a random community sample of 508,707 people*. Imperial College London. https://bit.ly/38vrF5x
[42] Halliday J, Pidd H. (2021). Concerns raised over long Covid impact on north-west England. *The Guardian, 21/5/21*. https://bit.ly/2WBUzyP
[43] Public Health England. (2020). *COVID-19: review of disparities in risks and outcomes*. https://bit.ly/3klrtpj
[44] Kings College London. (2021.) *Early COVID-19 symptoms differ among age groups, research finds*. https://bit.ly/3yDLd2e

acute disease is much higher for males (70%) compared to females.[45] Bolton is expected to mirror this national picture.

Underlying health conditions putting people at greater risk from Covid-19 are especially prevalent among older people from Asian Bangladeshi, Asian Pakistani and Black Caribbean backgrounds.[46]

Figure 7 shows hospitalisation rates over time for Bolton compared to the rest of England. Bolton has seen relatively high rates over time, particularly towards the end of 2020 with similar rates again at the start of 2021 though not such a large increase in early 2021 as seen in some other areas.

Figure 7. Covid-19 cases in hospital in Bolton compared with the rest of England (rolling 7-day average, August 2020-June 2021)[47],[48]

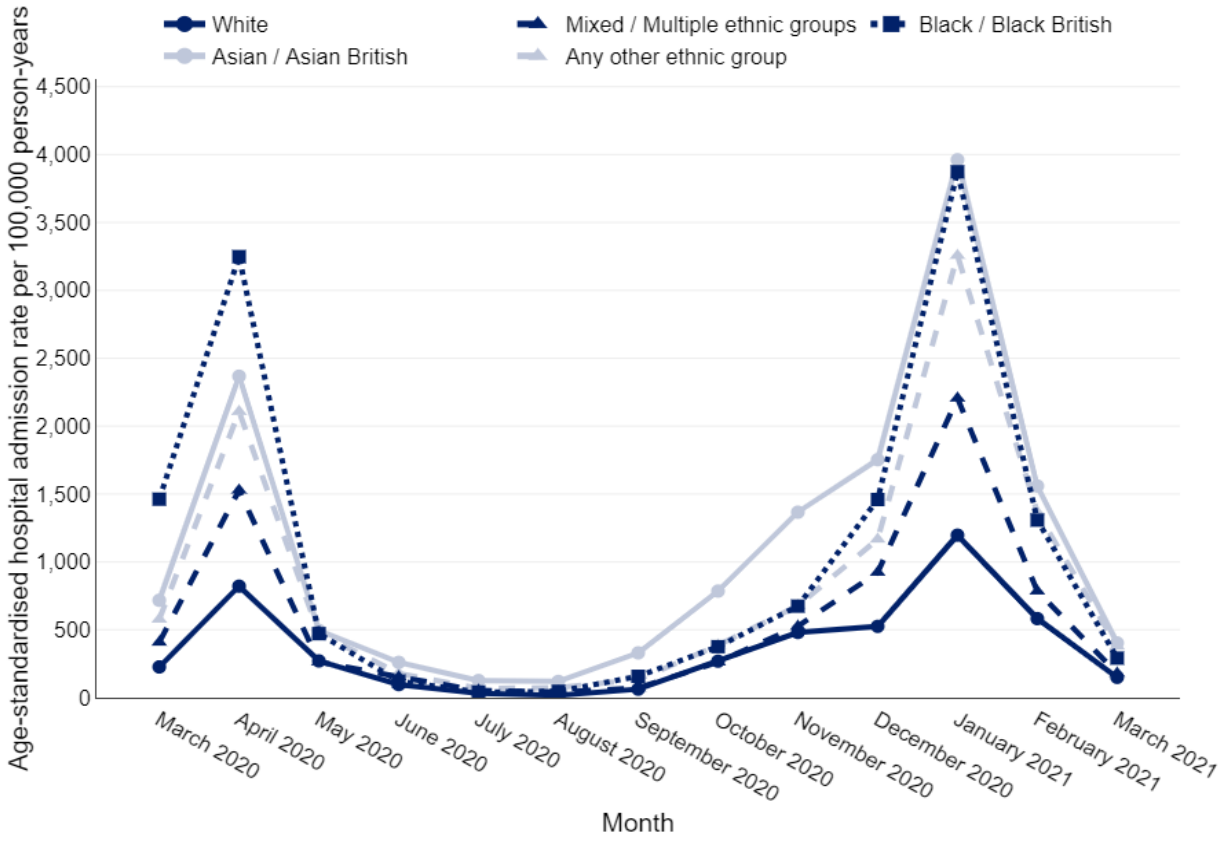


People from minority ethnic groups have seen higher rates of hospitalisations and admissions to intensive care units because of Covid-19 compared to White groups [49] (Figure 8). Data from the second wave found that individuals from South Asian heritage had a higher risk of severe Covid-19 outcomes including hospitalisations, intensive care

[45] ONS (2021). ONS: *Differential impacts of the Coronavirus pandemic on men and women*. https://bit.ly/3svysFM
[46] Platt L, Warwick R. (2020). *Are some ethnic groups more vulnerable to COVID-19 than others?* The Institute for Fiscal Studies. https://bit.ly/2VEPZze
[47] Rolling 7 day average of confirmed new Covid-19 admissions per 100,000 inhabitants in Bolton compared to other local authorities in England. Data is published at NHS Trust level, so these figures are apportioned between local authorities using data on the proportion of admissions to each trust originating from each LA in 2016-18. A small number of admissions from mental health specialist trusts are excluded from these plots. Admissions data is published weekly so may be missing for more recent days.
[48] Angus C. (2020). *Covid-19 Local Authority Death and Case Plots*. The University of Sheffield. Online resource. https://bit.ly/3xOKVHh
[49] Mathur R, Rentsch CT, Morton CE, Hulme WJ, Schultze A, MacKenna B, et al. Ethnic differences in SARS-CoV-2 infection and COVID-19-related hospitalisation, intensive care unit admission, and death in 17 million adults in England: an observational cohort study using the OpenSAFELY platform. *The Lancet, 397(10286)*, p1711-1724 https://bit.ly/3gbJUl0

unit (ICU) admissions and deaths[50]. This risk of a poorer outcome may be related to higher levels of some co-morbidities in some ethnic minority groups, such as higher rates of Type 2 diabetes and for cardiovascular disease in people from Bangladeshi or Pakistani backgrounds compared to people with a White British ethnicity, or higher rates of high blood pressure (hypertension) amongst individuals of Black Caribbean or Black African ethnicity compared to other ethnic backgrounds. [50] The same pattern is expected among Bolton residents.

Figure 8. Monthly age-standardised hospital admission rate per 100,000 person-years for Covid-19 in England by ethnic group [51] (March 2020 to March 2021)



People with a learning disability were five times more likely to be admitted to hospital due to illness from Covid-19 than people without a learning disability, even discounting demographic factors.[52] In Bolton, 0.5% of the population[53] (over 1000 people) is on the GP register for having a learning disability, and just under 3000 young people have an

[50] Public Health England. (2020). *COVID-19: review of disparities in risks and outcomes*. https://bit.ly/3kIrtpj
[51] Public Health England (2021). *COVID-19 Health Inequalities Monitoring for England (CHIME) tool*. https://bit.ly/38la9AR
[52] Williamson EJ, McDonald HI, Bhaskaran K, Walker AJ, Bacon S, et al. (2021). Risks of Covid-19 hospital admission and death for people with learning disability: population based cohort study using the OpenSAFELY platform. *The BMJ; 374*. https://bit.ly/3qTZzFU
[53] PHE (2021). *Fingertips: Learning Disability Profiles*. https://bit.ly/3lOULUA

Education, Health and Care Plan or Special Educational Needs with a primary need of moderate, severe, or specific learning difficulty[54]. People with learning disabilities often have poorer physical and mental health than other people, although this does not need to be the case. [55]

Covid-19 mortality

At the start of August 2021, over 130,000 people in the UK were reported to have died within 28 days of a positive Covid test. The peak number of daily deaths in the first wave was 1,076 and reached 1,359 at the peak of the second wave.[56] In Bolton 770 deaths were recorded by 1s August 2021.[57]

In the first wave, a higher proportion of deaths in Bolton were recorded in individuals in care homes, compared to in the second wave when deaths from Covid-19 recorded in hospitals made up the majority of cases of mortality (Figure 9).[58] This was also seen on a national level with the impact of Covid-19 falling hardest on residents of care homes compared to the general population during the first wave. Of the 48,213 Covid deaths registered between mid-March and mid-June 2020, 40% were care home residents – compared with 26% of the 62,250 deaths registered from 31 October to 5 February 2020/21.[59] In addition, the first wave surge in care home deaths, saw almost 26,000 excess deaths compared with the 2015–19 average, almost half (44%) of all excess deaths in England and Wales (Figure 10). [60] Demographics of those who have sadly died during the pandemic is not yet available at local authority level, but similar trends as to those seen nationally would be expected among Bolton residents.

[54] UK Government. (2021). *Academic Year 2020/21: Special educational needs in England* https://bit.ly/31StM3v
[55] NHS Choices. (2018). *Annual health checks: -Learning disabilities*. https://bit.ly/3oHcMpC
[56] UK Government. (2021). *Coronavirus (COVID-19) in the UK: Deaths in the United Kingdom*. https://bit.ly/3yL79sB
[57] UK Government. (2021). *Coronavirus (COVID-19) in the UK: Deaths in Bolton*. https://bit.ly/3t7xyPL
[58] Bolton JSNA (2021). Coronavirus resources. https://bit.ly/3mVL5sK
[59] Nuffield Trust (2021) Covid-19 and the deaths of care home residents https://bit.ly/3AFSO1o
[60] The King's Fund (2021) Deaths from Covid-19 (coronavirus): how are they counted and what do they show? https://bit.ly/3AGMfvF

Figure 9. Deaths with Covid-19 by week and place of death for Bolton (April 2020 to July 2021)

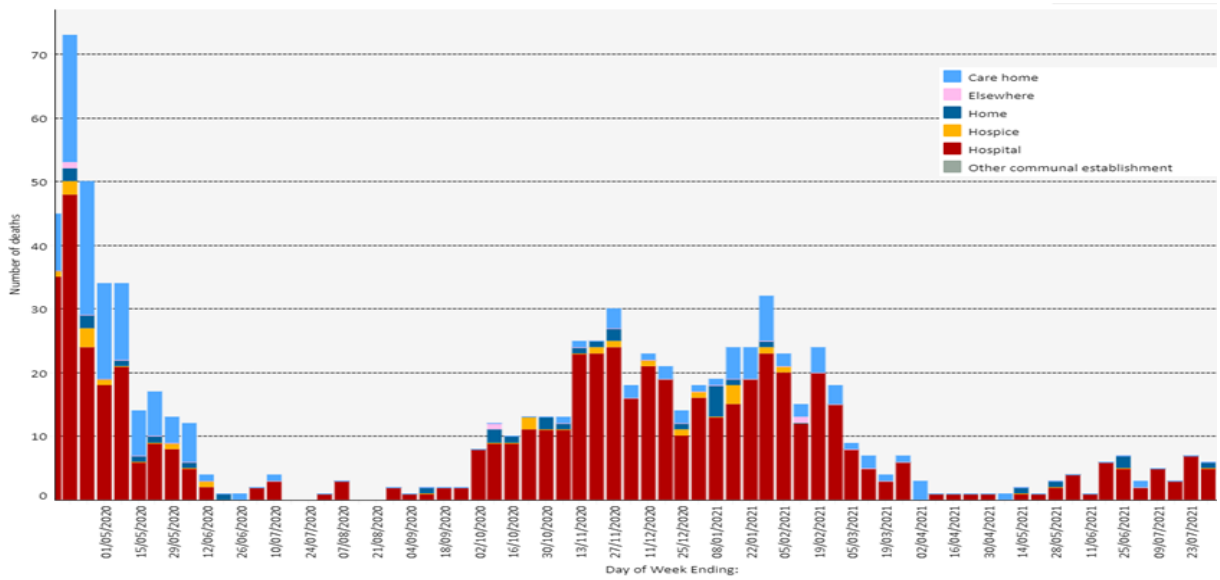
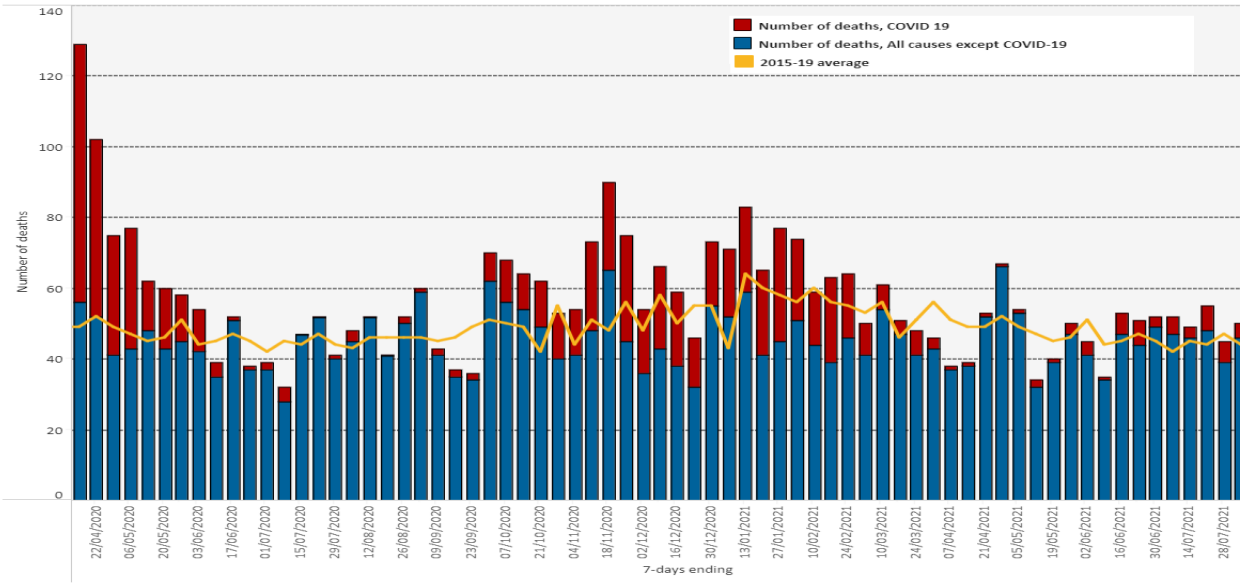


Figure 10. Deaths by week of occurrence for Bolton (April 2020 to July 2021)



Increasing age has played a significant role in increasing the risk of dying from Covid-19. Those aged 80 and over with a positive Covid test have been shown to have a risk of dying that is 70 times higher than in those aged 40 and under. 75% of excess deaths have occurred in those aged 75 and over, with a large proportion of these due to Covid-19.[61] There are 13,000 people in Bolton aged 80+ and 22,000 aged 75+, and these numbers are set to grow.[62]

[61] Public Health England. (2020). *COVID-19: review of disparities in risks and outcomes*. https://bit.ly/3kIrtpj
[62] ONS. (2021). Estimates of the population for the UK, England and Wales, Scotland and Northern Ireland: mid 2020 edition. https://bit.ly/3EIpVEw

Nationally, the number of Covid-19 related deaths has been higher among men than women. [63] Among people of traditional working age (20 to 64 years) in England and Wales between 9 March and 28 December 2020, the mortality rate involving COVID-19 was significantly greater among men than women (31 deaths per 100,000 compared with 17 deaths, respectively), after standardising for age.[64] This applied across all occupational groups. Life expectancy at birth in Bolton is already significantly lower than that of England as a whole: a difference of 2.1 years lower in Bolton for males; and there is a further inequality of 11.2 years in life expectancy for males between the most and least deprived areas within Bolton.[65]

Nationally, all 'non-White' ethnic groups have been at higher risk of death from Covid-19 than White groups [66], [67], but the highest risk has been for people from Pakistani and Bangladeshi backgrounds in both the national first and second waves. This increased risk factor remained even discounting factors such as pre-existing health conditions, the geographical areas people live in and socio-demographic factors were taken into account.[68] However, geography does have an independent impact on death rates, which are higher in more deprived areas, where people from Pakistani and Bangladeshi backgrounds are more likely to live.[69] Furthermore, people from Pakistani and Bangladeshi heritage are more likely to have underlying conditions, and get these earlier in life, which interact to produce higher risk of morbidity and mortality from Covid-19.[69] Social care and NHS workers from minority ethnic backgrounds also have higher rates of mortality from Covid-19.[69]

Higher rates of Covid-19 mortality were seen amongst disabled people[70] and broadly remained similarly high through the first and second waves. A multitude of factors are thought to account for these higher rates, including place of residence, socioeconomic demographics, geography and medical comorbidities all contributing. In addition,

---

[63] ONS. (2021). *Coronavirus (COVID-19) and the different effects on men and women in the UK, March 2020 to February 2021.* https://bit.ly/3GpaqSu
[64] ONS. (2021). *Coronavirus (COVID-19) and the different effects on men and women in the UK, March 2020 to February 2021.* https://bit.ly/3GpaqSu
[65] PHE (2021). *Public Health Outcomes Framework.* https://bit.ly/3rRSplj
[66] Scientific Advisory Group for Emergencies (SAGE). (2021). *COVID-19 Ethnicity subgroup: Interpreting differential health outcomes among minority ethnic groups in wave 1 and 2*. https://bit.ly/3yuKRet
[67] Mathur R, Rentsch CT, Morton CE, Hulme WJ, Schultze A, MacKenna B, et al. Ethnic differences in SARS-CoV-2 infection and COVID-19-related hospitalisation, intensive care unit admission, and death in 17 million adults in England: an observational cohort study using the OpenSAFELY platform. *The Lancet, 397(10286)*, p1711-1724 https://bit.ly/3gbJUl0
[68] HM Government. (2021). *Third quarterly report on progress to address COVID-19 health inequalities*. https://bit.ly/3iYA3Rj
[69] Raleigh V, Holmes J. (2021). *The health of people from ethnic minority groups in England*. The Kings Fund. https://bit.ly/3mRJ019
[70] The Health Foundation. (2021). *Unequal pandemic, fairer recovery: the COVID-19 impact enquiry report*. https://bit.ly/3gew0hL

individuals with a medically diagnosed learning disability were 1.7 times more likely to die from Covid-19 compared to those without, even when a range of factors have been statistically accounted for. Living in a care home further increased the risk of death from Covid-19 amongst individuals with a disability.[71]

Health inequalities between regions in the UK have been widening for the last decade. [72] These growing disparities have contributed to the differing rates of mortality from Covid-19 across the country, with the most deprived areas being hit hardest (Figure 11).[73] People in the top fifth most deprived areas of England had twice the risk of dying of Covid-19, and were dying at younger ages, compared with the fifth least deprived areas.[73] The higher rates of mortality from Covid-19 in individuals from more deprived areas may be due to higher levels of comorbidities in these groups including heart disease, obesity, chronic lung disease and diabetes.[74] These underlying health, regional and socioeconomic inequalities have therefore been exacerbated during Covid-19 and have contributed to the overall mortality rates seen throughout the pandemic.[75] Bolton already experiences inequalities over a range of indicators. Life expectancy provides an overall measure of population health, Figure 12 shows how a broad range of health conditions, including many of those thought to increase risk of death from Covid, contribute to the life expectancy gap between Bolton and England. Even before the pandemic, Bolton's life expectancy was lower than that seen in England as a whole a decade ago.[76].

[71] ONS. (2021). Updated estimates of coronavirus (COVID-19) related deaths by disability status, England: 24 January to 20 November 2020. https://bit.ly/2WBKgLb
[72] Institute of Health Equity. (2020). *Health equity in England: the Marmot review 10 years on.* https://bit.ly/3k8ayfL
[73] Institute of Health Equity. (2020). *Build back fairer: the COVID-19 Marmot review*. https://bit.ly/3xWqM08
[74] Local Government Association. (2021). *Deprivation and poverty - The impact of COVID-19*. https://bit.ly/3yDSIWW
[75] Excess deaths from COVID-19 and other causes by region, neighbourhood deprivation level and place of death during the first 30 weeks of the pandemic in England and Wales: A retrospective registry study - The Lancet Regional Health – Europe
[76] PHE. (2019). *Local authority trends in life expectancy, 2010-12 – 2016-18.* https://bit.ly/31KLzK8

Figure 11. Monthly age-standardised mortality rate per 100,000 person-years by regional deprivation deciles; North West region, persons (March 2020-April 2021) [77]

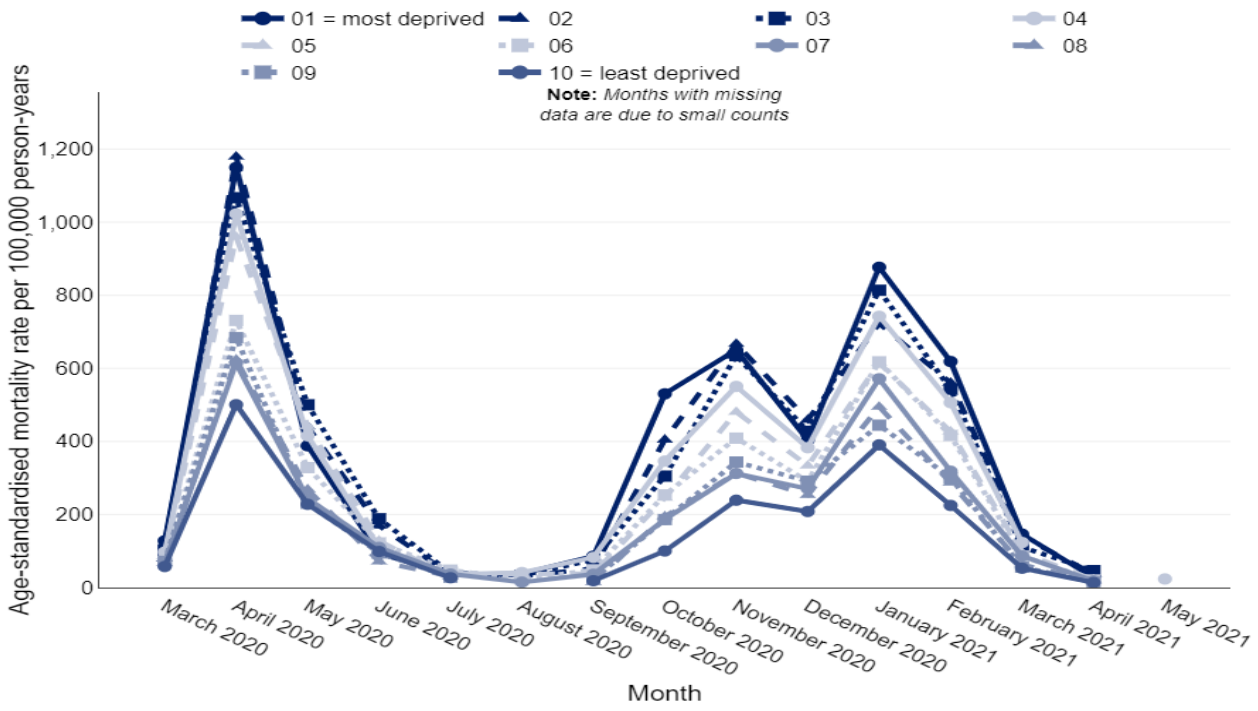
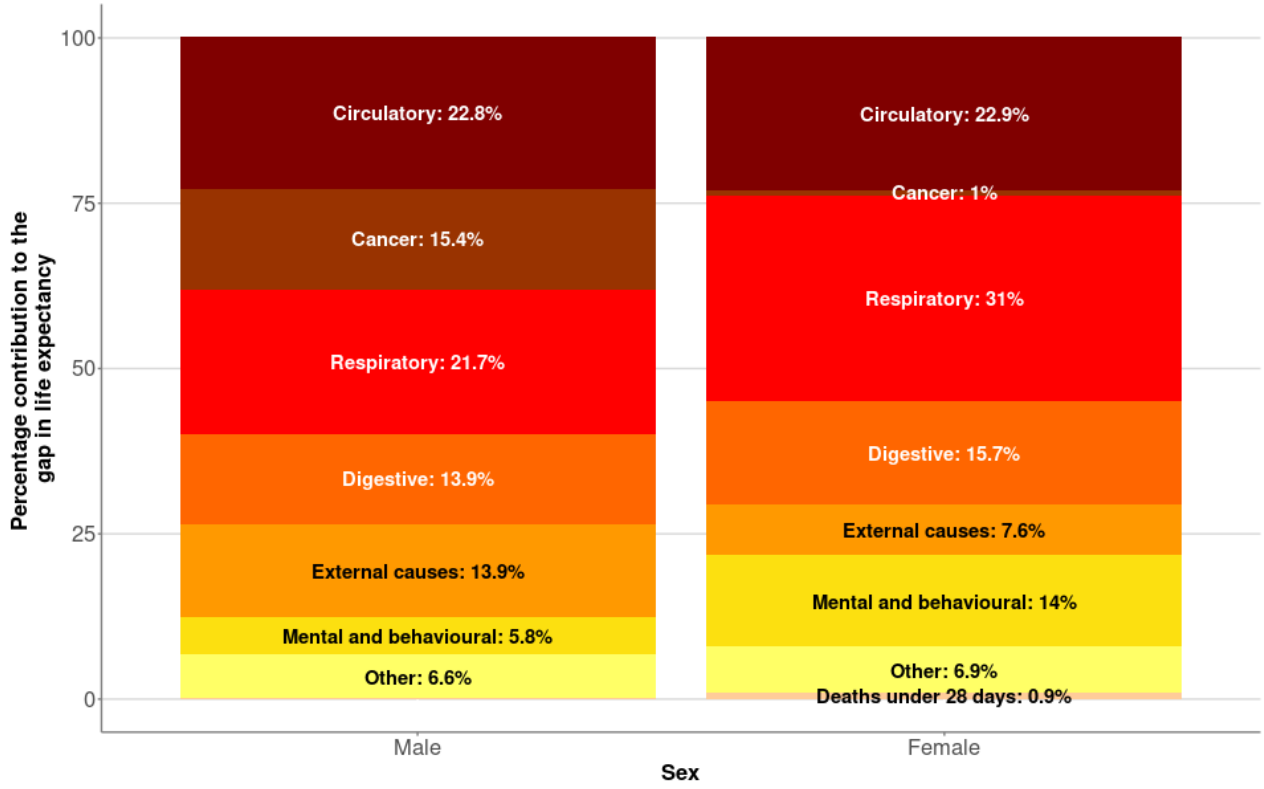


Figure 12. Scarf chart showing the breakdown of the life expectancy gap between Bolton as a whole and England as a whole by broad cause of death (2015-17)[78]

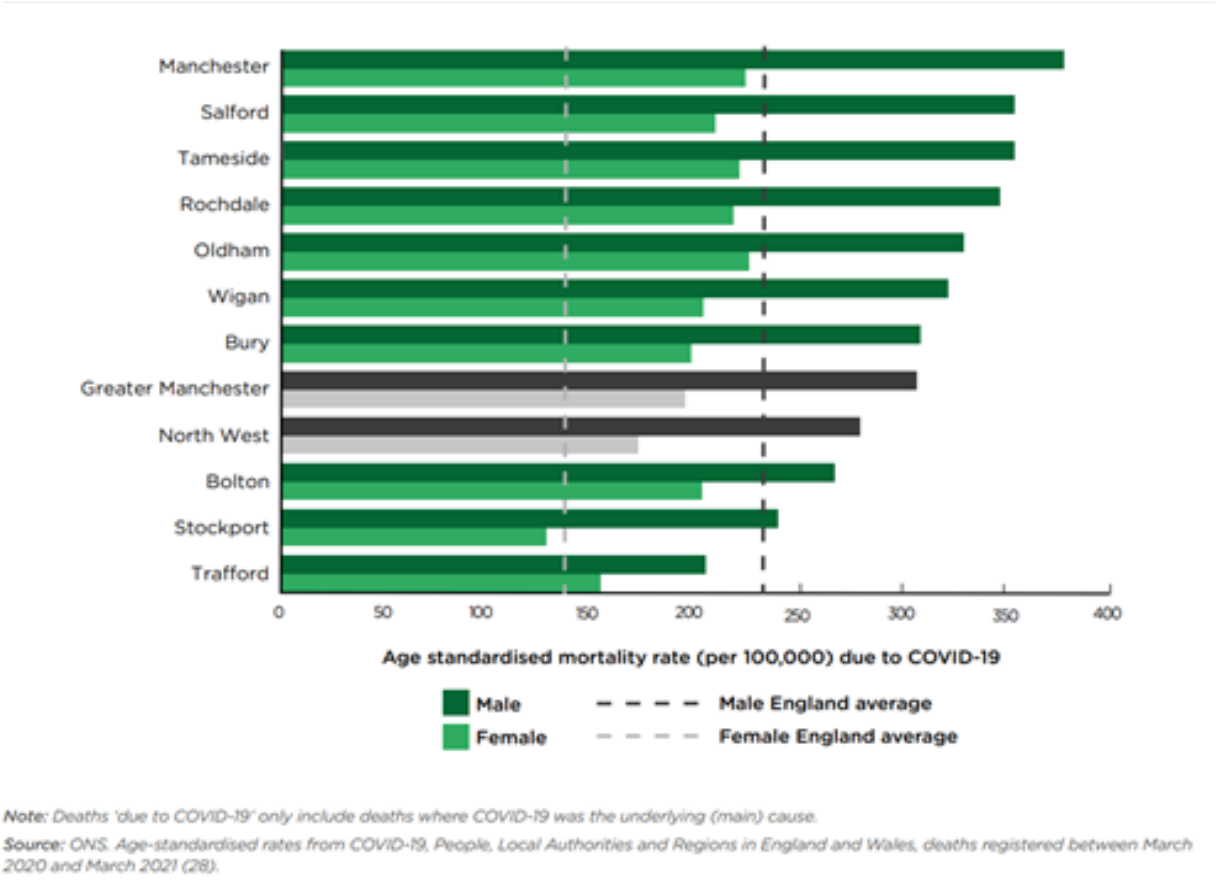
[77] Public Health England (2021). *COVID-19 Health Inequalities Monitoring for England (CHIME) tool*. https://bit.ly/38la9AR
[78] PHE (nd). *Segment tool*. https://bit.ly/31Qop4y



In the national second wave, the North West had the highest rates of excess deaths due to Covid-19[79], with Greater Manchester seeing Covid-19 mortality rates 25% higher than England as a whole during the pandemic. [80] Figure 9 (on page 6) shows Bolton numbers of deaths over time, peaking in spring of 2020 with unfortunately many residents of care homes, reflecting increased age being the biggest risk factor for covid mortality, followed by winter 2020/21. Furthermore, socioeconomic differences in mortality rates from Covid-19 across Greater Manchester are also wider than in the rest of England. Bolton is similar to Greater Manchester as a whole in terms of its demographic make-up of occupations, employment statuses, levels of deprivation, working and living conditions, ethnicity and physical interconnectedness, and these likely account for the high levels of Covid-19 mortality seen in Bolton as in the city region.[80]

[79] Scientific Advisory Group for Emergencies (SAGE). (2021). *COVID-19 Ethnicity subgroup: Interpreting differential health outcomes among minority ethnic groups in wave 1 and 2*. https://bit.ly/3yuKRet
[80] Institute of Health Equity. (2021). Build back fairer in Greater Manchester: health equity and dignified lives. https://bit.ly/37QwC8T

Figure 13. Age standardised Covid-19 mortality per 100,000 for England, the North West, Greater Manchester and it's local authorities (March 2020 to March 2021)- *Taken from Institute of Health Equity (2021) Build Back Fairer in Greater Manchester: Health Equity and Dignified Lives*



Note: Deaths 'due to COVID-19' only include deaths where COVID-19 was the underlying (main) cause.

Source: ONS. Age-standardised rates from COVID-19, People, Local Authorities and Regions in England and Wales, deaths registered between March 2020 and March 2021 (28).

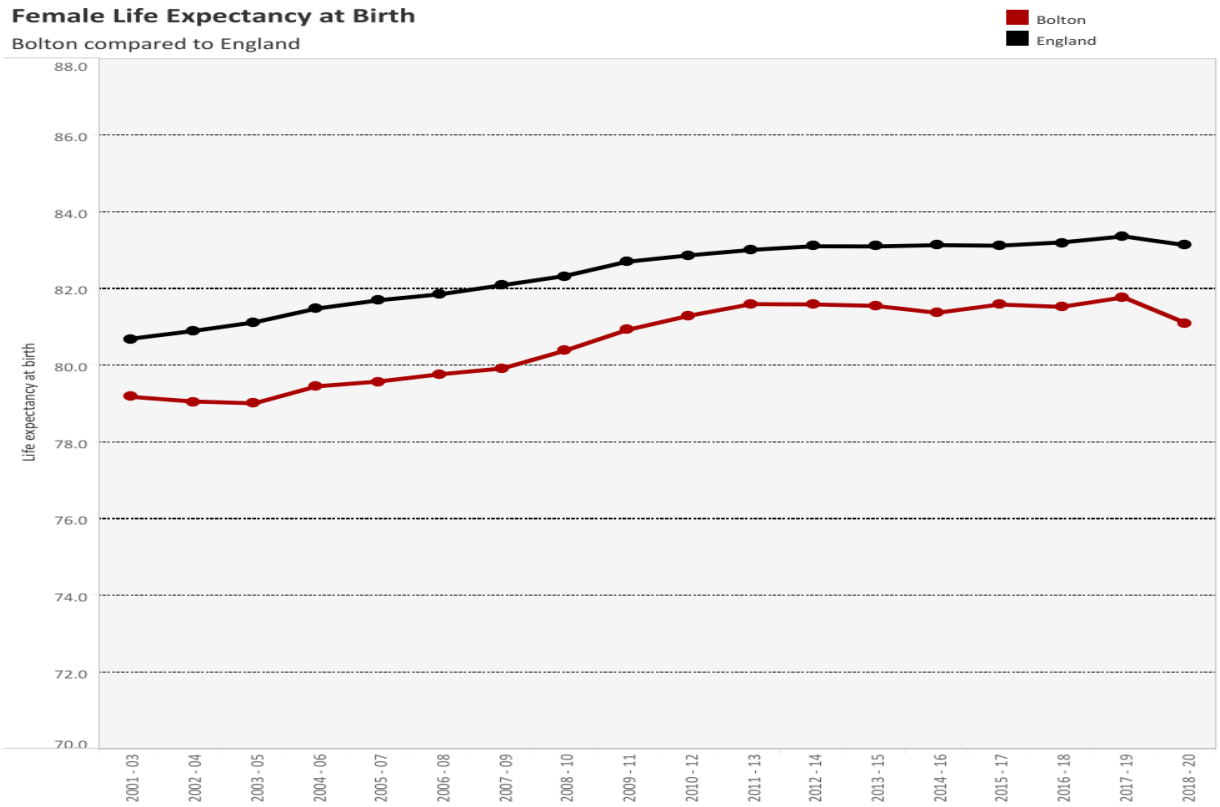
Figure 13 shows that the Covid-19 mortality rates in both Greater Manchester and Bolton (for both males and females) were found to be higher than the England average. Amongst GM authorities, it can also be noted that only Trafford (men) and Stockport (women) were lower than the England average, therefore the vast majority of local authorities within Greater Manchester had higher Covid-19 mortality rates than England over this data period.

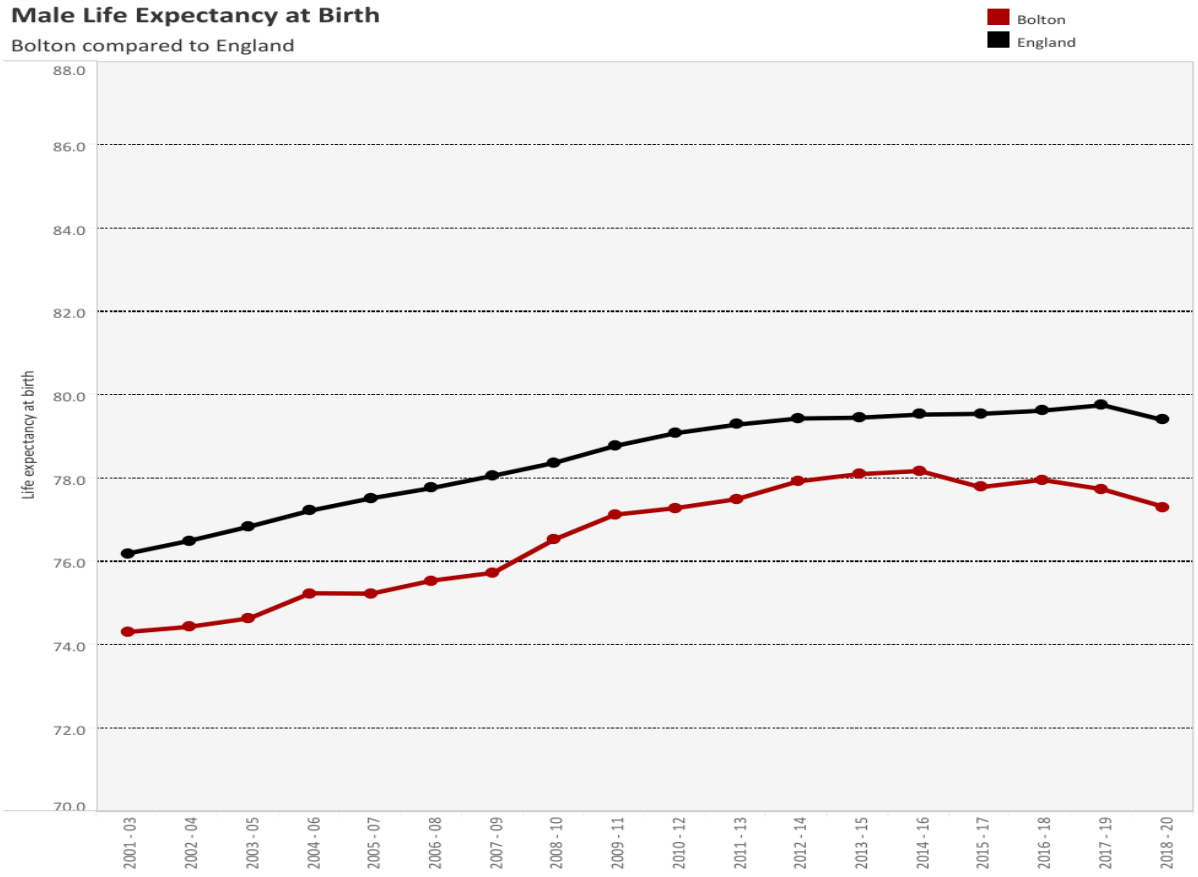
Life expectancy at birth for local authorities is calculated from three years' worth of data; figures have now been released including 2020, covering the first part of the pandemic. Comparing life expectancy nationally, the highest life expectancies tend to be found among local authorities in London and the South of England, for both males and females, whereas local areas from the North of England, particularly the North West, make up the lowest. Comparing non-overlapping time periods, gaps in male life expectancy between local areas in England grew from 9.1 years in 2015-2017 to 10.7 years in 2018-2020; for females, it grew from 7.0 years to 8.9 years.

Up until the release of the 2018-2020 data, Bolton's trend was relatively stable in males and had been making slight improvements within female life expectancy. The recent fall, covering the initial Covid period in female and male life expectancy at birth is the sharpest decrease in life expectancy Bolton has seen within a single time period in the last 20 years. There have been similar changes in female and male life expectancy at birth during 2018-2020 when compared to 2015-2017 in Bolton, with females seeing a reduction of 5.8 months while males having reduced by 5.6 months (Figure 14). This data only covers part of the pandemic and Bolton's mortality rates have continued higher than over the previous 5 year average. Excess deaths from causes other than Covid have been seen, particularly relating to cardiovascular disease and other circulatory diseases, and diabetes[81], where Bolton already had higher death rates than England[82].

[81] UKHSA (2021). *Excess Mortality in England by cause of death*.
[82] PHE. (2021). *Public Health Outcomes Framework.* https://bit.ly/3EMgUu3

Figure 14. Life expectancy at birth for Bolton compared to England (2001 to 2020)





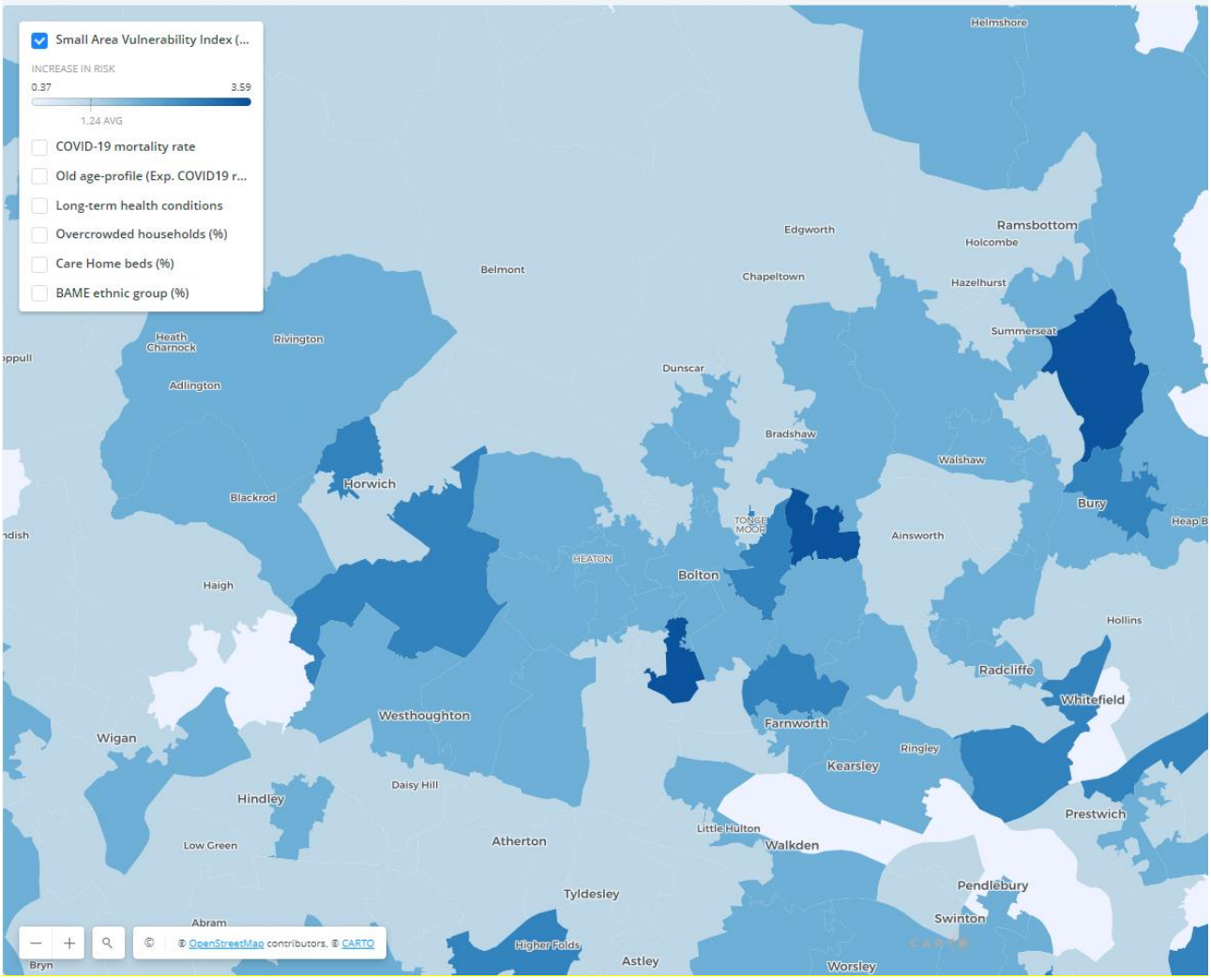
Chapter 2. Understanding the determinants of COVID: health inequalities in Bolton

Overview

Covid has widened a gap which runs along the lines of existing inequalities. The Savi index[83],[84] combined a number of factors described in more detail below and identified areas of Bolton most at risk (Figure 15). Bolton's workforce includes many lower paid, frontline and keyworkers with increased exposure to Covid and fewer opportunities to work from home. Nationally the economic impacts of the coronavirus pandemic have specifically affected women, young people, and people from minority ethnic backgrounds and migrant groups, because they are over-represented in some of the worst-hit sectors. Overall, women do a greater share of unpaid care compared to men. Experiences of young people early in their working lives at the time of recession can have longer lasting impacts, including on intergenerational transmission of poverty. There is evidence to indicate that the type of employment in Bolton has put a higher proportion of our working age population at increased risk of covid infection, and hence increased morbidity and mortality. It will be important to consider how impacts from multiple sources of disadvantage interact in the borough's recovery.

[83] University of Liverpool (2022). Small Area Vulnerability Index (SAVI) https://bit.ly/3nB0xdc
[84] Daras K, Alexiou A, Rose TC, et al (2021). How does vulnerability to COVID-19 vary between communities in England? Developing a Small Area Vulnerability Index (SAVI) Journal of Epidemiology and Community Health Published Online First: 04 February 2021. DOI: 10.1136/jech-2020-215227

Figure 15. Small Area Vulnerability Index. Darker areas are at greater risk of Covid-19 vulnerability



Employment is one of the most important determinants of physical and mental health; with both long-term unemployment and job insecurity having negative health outcomes. The challenge of being unemployed is also not limited to individuals but on the whole household. Unemployment dramatically increased in Bolton at the start of the first lockdown. Every area in Bolton has shown an increase in the unemployment rate since March 2020, with the largest increases occurring in parts of Halliwell and Rumworth wards. In many parts of the borough more than 17% of the working age population is unemployed. Initially, the 16-24 year old age group was hit hardest by the pandemic but unemployment claims from workers aged over 50 began to pick up notably over autumn/ winter 2020/2021. Many workers in retail and the hospitality industry were presenting as unemployed, Construction and manufacturing especially has also suffered – these represent a slightly larger than average proportion of Bolton's economy. Business Bolton has provided a range of services to affected local businesses.

Research found that compliance with the test, trace and isolate system was lower amongst those of a lower socio-economic status, those who were facing money problems and those with a child living with them: one of the main reasons was because of financial implications of taking time off work. This has also been found to be a barrier for people from ethnic minority backgrounds as well, who are more likely to be in occupations that do not allow them to take time off and/or cannot afford to. Debt burdens have increased to a greater extent in most deprived than least deprived households over the course of the pandemic. Other reasons for not being tested include access to the test centres, especially when via drive through/ not on public transport route or having access to childcare. Bolton Council's Covid-19 Response Hub has provided support and help to access essential supplies and payment for residents who have been required to isolate.

Evidence from Bolton's Covid-19 Variant Response exercise showed that intensive surge actions were effective in increasing testing among people living in more deprived areas, and from minority ethnic groups. This is because the Council and partners took the surge testing into communities via mobile testing units, schools, workplaces and door to door deliver and collection.

Housing plays a key role in the spread of Covid-19, as well as the experience for individuals and families of periods of 'stay at home' restrictions, and the ability of infectious individuals to self-isolate, since not everyone has had access to appropriate indoor or outdoor space. In Bolton, wards around central Bolton have high levels of private rented properties, and increased likelihood of overcrowding, which is a key factor increasing the risk of transmission within households. Poor housing conditions such as overcrowding and unsafe spaces have contributed to greater spread of Covid-19 with households, whilst time spent in poor quality housing has well established direct and indirect impacts on health. For example, a home that is well insulated, well maintained and easier to heat will enable a household to ventilate and help reduce the risk of Covid transmission, or instability in the private rented sector may impact on levels of stress.

Stigma has a detrimental impact upon health, and this has been observed among people from minority ethnic population groups during the pandemic; Pakistani and Bangladeshi groups face stigma on multiple fronts, and regarding religion and ethnicity, which has been felt more keenly for some due to the timing of some Covid-19 control measures with

cultural celebrations and festivals, and the initial naming of Variants of Concern after the country of first identification, which wasn't necessarily where it originated.

As discussed further on page 41, there is some evidence that certain groups are less likely to understand and/or trust messaging coming from government around Covid-19 and thus less able to comply with guidelines. There was evidence for people from minority ethnic population groups and/or people on a low income did not believe in the severity of Covid-19 or were unconvinced of how much difference it would make to follow public health guidance. Furthermore, because the messaging was in English, with no British Sign Language accompanying daily briefings, messaging was targeted to adults not children and young people, challenges to access multi-lingual messages. The Greater Manchester Covid Survey, which includes Bolton residents, asks about trust in a number of contexts relating to Covid behaviour. Although not among the most common responses, issues around trust occurred for several questions.

Work (employment)

Nature of work

National research has found that type of employment has an impact on Covid-19 rates. Bolton's workforce includes many lower paid, frontline and keyworkers with increased exposure to Covid, widening a gap which runs along the lines of existing inequalities between those who can and those who cannot work from home. Critical workers[85] were found to have an increased risk of infection during the first 'stay at home' restrictions.[86] Critical workers were also found to be less likely to fully isolate and less likely to identify common symptoms of Covid-19.[87] The exact reasons are not known, but it may be part of a wider pattern of challenges with meeting the requirements since the same study found financial hardship, deprivation, lower socio-economic status, and having a dependent child in the household showed a pattern of associations with lower adherence to full self-isolation, not requesting a test, and poorer symptom recognition. This has opened up a gap between those who can and those who cannot work from home, a gap which runs along the lines of existing inequalities; occupations requiring higher qualifications and

[85] Those who worked in a government defined critical sector: health and social care, education and childcare, local and national government, food and other necessary goods, public safety and national security, transport and border, utilities communication and financial services.
[86] Topriceanu C-C, Wong A, Moon JC, Hughes AD, Chaturvedi N, Conti G, Bann D, Patiala P, Captur G. (2021). Impact of lockdown on key workers: findings from the COVID-19 survey in four UK national longitudinal studies. *Journal of Epidemiology and Community Health, doi: 10.1136*. https://bit.ly/3xRGYji
[87] Smith LE, Potts HWW, Amlôt R, Fear NT, Michie S, Rubin GJ. (2021). Adherence to the test, trace, and isolate system in the UK: results from 37 nationally representative surveys. *BMJ, 372:n608*. https://bit.ly/2XwIgUh

more experience were more likely to provide homeworking opportunities than elementary and manual occupations.[88]

The Annual Population Survey[89] is a household survey conducted in the UK looking at social and socio-economic information such as education, health and employment. One part of this survey looks at the levels of people who work from home (mainly, or all of the time) and subsequently those who do not. This provides a picture for Bolton in terms of the numbers of residents who could possibly work from home during the pandemic compared to regional and national figures.

The results show that only 23.4% of Bolton residents responded that they had ever worked from home compared to 30.7% for the North West and 36.5% for the UK. In addition, when asked if they had worked from home in the week prior to interview, again Bolton was far lower than both regional and national figures with only 16% working at home during this period compared to 21.8% for the North West and 25.9% for the UK. These figures show that residents in Bolton were far less likely to have ever to worked from home usually and therefore are less prepared (by employer and/ or employee) or able to do so during a pandemic.

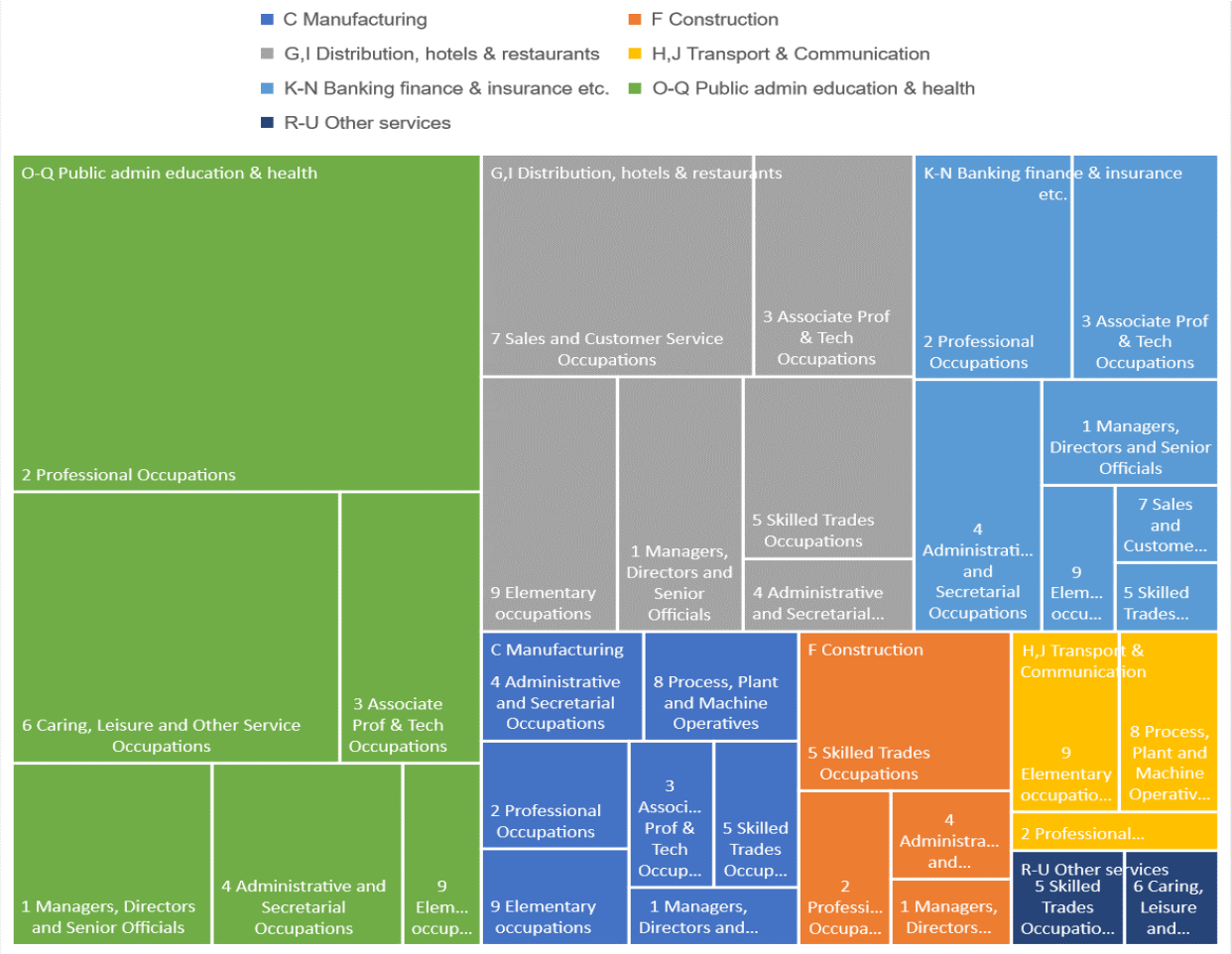
The largest sector for jobs located in Bolton is 'Public administration, education and health' at 39% of jobs, followed by 'Distribution, hotels and restaurants' (22%), 'Banking finance and insurance etc.' (15%) and 'Manufacturing' (10%). 'Manufacturing' has a high proportion of 'elementary occupations', while 'Public administration, education and health' has a high proportion of professional roles (see Figure 15). Therefore, it is clear that during national, regional, local and tiered restrictions, a high proportion of Bolton's workforce was unable to work from home and had to attend work in person.

It is evident that the impact of the pandemic across employment sectors is not equally distributed with certain sectors more at risk of financial hardship (permanent lay off, furlough and reduced hours/ pay) than others. Research examining the levels of furlough across sectors revealed that 73% of workers in accommodation and food services and 46% of those in construction had been furloughed. At the same time, 14% of those in water utilities and 13% of those in information and communication had experienced the

[88] ONS. (2020). *Coronavirus and homeworking in the UK*. https://bit.ly/2XDBBrC
[89] ONS (2021) Homeworking in the UK Labour Market https://bit.ly/39bet6h

same [90] (See Figure 16). For sectors which did shut down for periods of time, such as hotels and restaurants, staff may have missed out on bonuses, tips, additional shifts that keep their basic wage up, so will have received less money compared to pre-pandemic times, resulting in greater financial hardship.

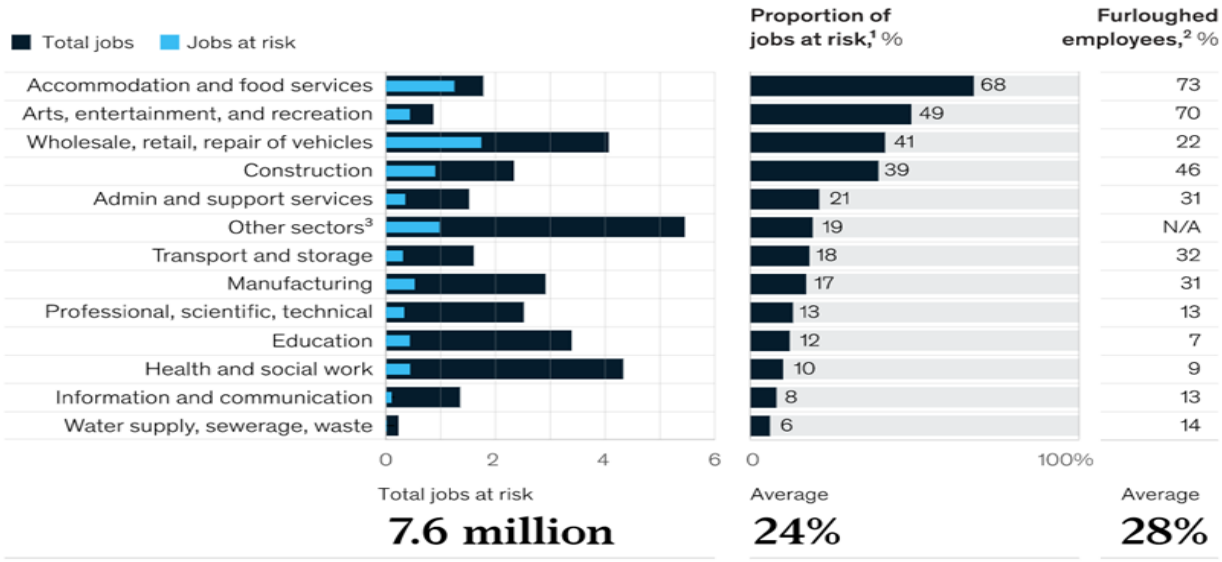
Figure 16. Number of jobs located in Bolton by occupation and industry (Jan 2020-Dec 2020)[91] *Larger area indicates larger number of jobs*



[90] McKinsey and Company (2021) COVID-19 in the United Kingdom: Assessing jobs at risk and the impact on people and places https://mck.co/3DJDkMq

[91] Nomis. (2021). *Annual population survey - workplace analysis*. https://bit.ly/3diMHXG

Figure 17. Proportion of jobs at risk and furloughed employees in the UK (2019)-McKinsey and Company (2021)



The latest figures for Bolton show that 5,000 residents work in 'Accommodation and Food Services' along with 2,250 residents working in 'Arts, entertainment and recreation'. These are employment sectors that have been considered to be the most at risk of permanent layoffs, temporary furloughs, and reductions in hours and pay. [92] This makes a total of 7,250 Bolton residents who work within these sectors, accounting for 4.1% of the working age population in Bolton. This could be an under estimation as the data source that this is based on is from 2019.

Nationally, women have been specifically affected by the economic impacts of the coronavirus pandemic. Reasons for this include that they are over-represented in some of the worst-hit sectors, and that they do a greater share of unpaid care. [93] Women are the majority of employees in industries with some of the highest Covid-19 job losses, including retail, accommodation and food services.[93] At the start of the pandemic, women from minority ethnic groups had one of the lowest rates of employment, and between Quarter 3 of 2019 and Quarter 3 of 2020, the number of female workers from minority ethnic backgrounds had fallen by 17%, compared to 1% for White women.[94]

[92] Nomis (2020) *Labour Market Profile- Bolton* https://bit.ly/3zJfmP8
[93] Newson, N. (2021). *Covid-19: Empowering women in the recovery from the impact of the pandemic*. House of Lords Library. https://bit.ly/31AwUk6
[94] Newson, N. (2021). *Covid-19: Empowering women in the recovery from the impact of the pandemic*. House of Lords Library. https://bit.ly/31AwUk6

National figures show that 46% of mothers who have been made redundant during the pandemic quote lack of adequate childcare as the cause, and 70% of women with caring responsibilities who requested furlough following school closures in 2021 had their request denied; this has led to almost half of working mothers (48%) being worried about negative treatment from an employer because of childcare responsibilities.[92] During the first national lockdown, those in low-paid work were twice as likely to be on furlough or have their hours reduced as those in higher income jobs, hitting women in particular as there are twice as many women as men in the bottom 10% of earners. [92] The Bolton picture would be expected to reflect the national situation, but it will be important to consider how impacts from multiple sources of disadvantage interact in the borough's recovery.

In the UK, young people's employment has been particularly impacted by the pandemic. The employment rate for young people (aged 16-24) saw a large decline in 2020 compared with 2019, while their unemployment and economic inactivity rates increased. After an initial fall in young people in full-time education in the first few months of the pandemic, the proportion of young people in full-time education increased in the second half of 2020, reaching a new high of 46.8% in Quarter 3 (July to Sept) 2020. Experiences of young people early in their working lives at the time of recession can have longer lasting impacts, including on intergenerational transmission of poverty. [95] Young people working in the accommodation and food services industry were particularly likely to move into unemployment or economic inactivity, as were those who previously worked part time. [96]

In Bolton, 36% of people aged 16-24 work part time, compared with 28% of those aged 25-64; while 24% of those aged 16-24 work in 'Distribution, hotels & restaurants' compared with 8% of those aged 25-64. [97] This suggests that younger people in Bolton are more vulnerable to the negative impact of the pandemic than other age groups as they are more likely to work less hours and in sectors which are most at risk.

It has also been found that inequalities in employment exists between different ethnic groups with a disproportionate economic impact falling on people from minority ethnic backgrounds and migrant groups. Migrants from an ethnic minority background were also

[95] Marcus R, Gavrilovic M. (2010). The Impacts of the Economic Crisis on Youth: Review of Evidence. Overseas Development Institute. https://bit.ly/3xa4sBv
[96] ONS (2021). Coronavirus and changing young people's labour market outcomes in the UK. https://bit.ly/3y168fk
[97] NOMIS (2020). Annual population survey.

found to be particularly vulnerable being over three times more likely than their White non-migrant counterparts to have lost their job during the Covid-19 lockdown.[98]

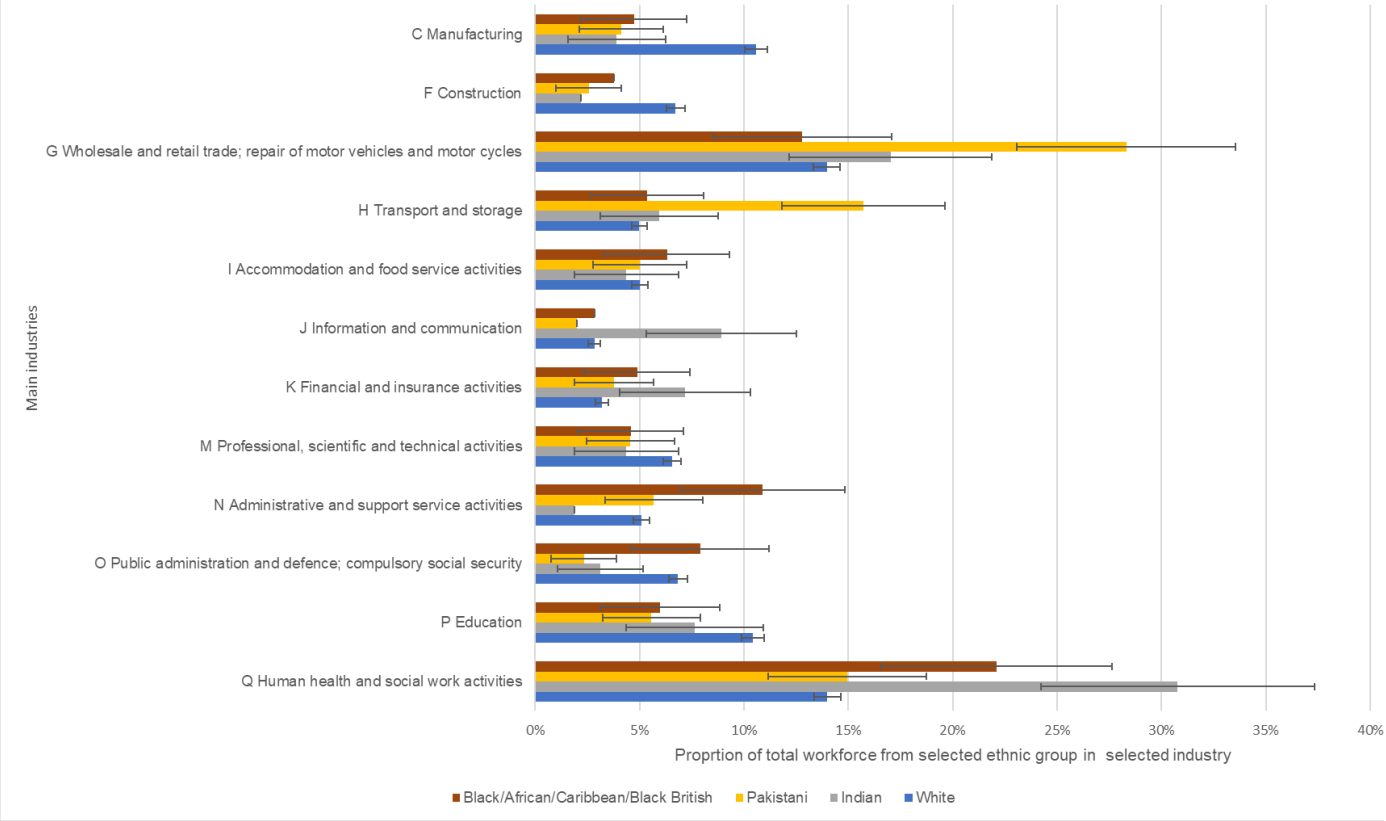
Nationally, people from Pakistani and Bangladeshi backgrounds are more likely to have occupational risks of infection from Covid-19 because of the type of work (being more likely to work in public-facing roles such as retail, hospitality and driving jobs) and the nature of work (being more likely to be in unstable roles with less power to assert safety requirements and less ability to take time off sick or being self-employed in a small business with small profit margins, again with less ability to take time off).[99] As Figure 18 shows, in the North West people from Indian and Black British backgrounds are particularly likely to work in the 'human health and social work' sector which has been particularly exposed to the pandemic; people from Pakistani backgrounds are particularly likely to work in the Transport sector, which will offer fewer opportunities for home working and more opportunity with mixing with other people.

Inability to take time off work for vaccinations could be one of the explanations behind why certain groups, including those in the lowest paid and most precarious jobs, are less likely to get the Covid-19 vaccine.[100] In relation to vaccine hesitancy, the Race Disparity Unit expressed concern in particular about risks for Black workers in the healthcare sector.[100]

There is strong evidence that the type of employment that dominates in Bolton has put a higher proportion of our working age population at increased risk of covid infection, and hence increased morbidity and mortality.

[98] The Conversation (2020) Black, Asian and other minority groups are more likely to have lost their jobs in lockdown – new research https://bit.ly/2WRRfQ6
[99] Scientific Advisory Group for Emergencies. (2021). COVID-19 *Ethnicity subgroup: Interpreting differential health outcomes among minority ethnic groups in wave 1 and 2*. https://bit.ly/3swfVZJ
[100] Race Disparity Unit. (2021). Third quarterly report on progress to address COVID-19 health inequalities https://bit.ly/2Xw6H4y

Figure 18.Variation in proportion of workforce in difference industries by ethnicity (NW, Jan 2019-Dec 2019)[101]



Unemployment

Employment is one of the most important determinants of physical and mental health; the long-term unemployed have a lower life expectancy and worse health than those in work.[102] Unemployment is associated with a range of heath inequalities and challenges including the effects of reduced income and consequent poverty on both physical and mental health. The challenge of being unemployed is also not limited to individuals but on the whole household with children growing up in workless households being almost twice as likely to fail at all stages of education compared with children growing up in working families.[103]

Job insecurity also has been found to show increased effects on mental health, particularly anxiety and depression, self-reported ill health, heart disease and risk factors for heart disease. Therefore, it can be argued that insecure jobs and instability may be as

[101] NOMIS (2019). *Annual population survey – regional – ethnicity by industry: dataset*. https://bit.ly/3k8OSjx
[102] Bartley M, Ferrie J, Montgomery SM. (2005) Chapter 5: Health and labour market disadvantage: unemployment, non-employment and job insecurity. *Social Determinants of Health 2nd Edition*. Oxford University Press: Oxford
[103] DWP (2017) Improving Lives, Helping Workless Families https://bit.ly/3hnRwl1

detrimental on a person's health as unemployment and thus being employed does not automatically protect physical and mental health.[104]

In January 2021, Bolton had over 14,500 people in receipt of out of work benefits, this may be an underestimate of the true figure since not everyone who is unemployed will claim these benefits. Unemployment dramatically increased in Bolton at the start of the first lockdown: from Mar April 2020, it increased from 4.9% to 7.3% i.e. 4,300 additional claimants in the space of one month (Figure 19). Bolton's unemployment rate varies considerably across the borough. Every area in Bolton has shown an increase in the unemployment rate since March 2020, with the largest increases occurring in parts of Halliwell and Rumworth ward; other areas with significant increases include Crompton, Tonge with the Haugh, Great Lever, Breightmet, Horwich and Farnworth. By July 2021, Bolton had 13,480 Job Seekers Allowance claimants and out of work Universal Credit claimants. This was a rate of 7.7% and the fourth highest rate in Greater Manchester during that data period. The vast majority of unemployment in July 2021 was concentrated in the central wards of Halliwell, Crompton, Tonge with the Haugh, Great Lever, Rumworth, Breightmet and Farnworth (Figure 20).

In many parts of the borough, more than 17% of the working age population is unemployed. Initially, the 16-24 year old age group was hit hardest by the pandemic. Claims from this age group more than doubled between January 2020 and January 2021. However, claims from workers aged over 50 began to pick up notably between September 2020 and January 2021. Claims for unemployment related benefits in Greater Manchester have been broadly consistent for men and women throughout the pandemic. Many workers in retail and the hospitality industry are presenting as unemployed, construction and manufacturing especially has also suffered; these represent a slightly larger than average proportion of Bolton's economy. Particular industries that have been least affected (financial services, digital services, agriculture) do not have a significant presence in Bolton.[105] Taking all of these factors into account, Bolton appears particularly vulnerable to the impact of the pandemic in relation to unemployment; the sectors which have suffered the most account for a larger than average proportion of the borough's economy and in contrast the sectors which are less affected make up a smaller proportion in Bolton.

[104] WHO Europe (2003) Social Determinants of Health: The Solid Facts (2nd Ed.) https://bit.ly/3DPMBT9
[105] Bolton Council. (2021). Economic Impact of COVID 19 and how we develop a plan for growth and resilience.

Figure 19. Trend in Unemployment in Bolton compared to Greater Manchester/Manchester (January 2019 to January 2021)

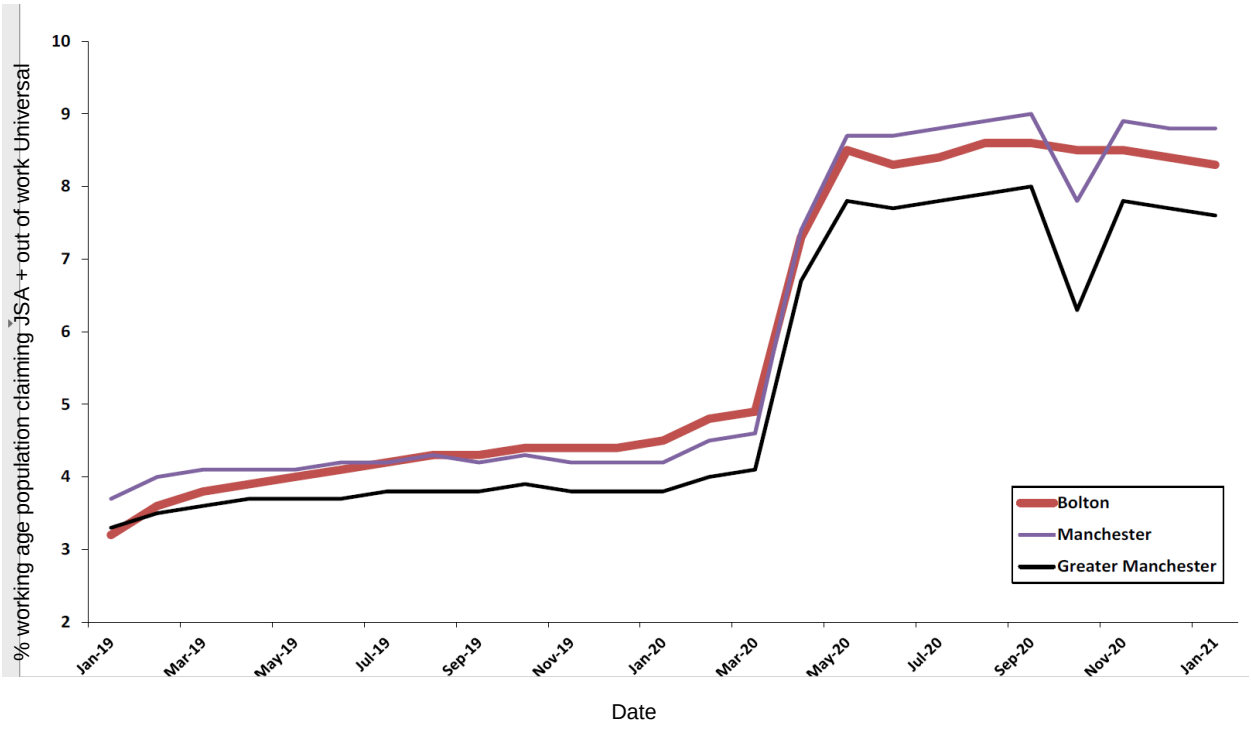
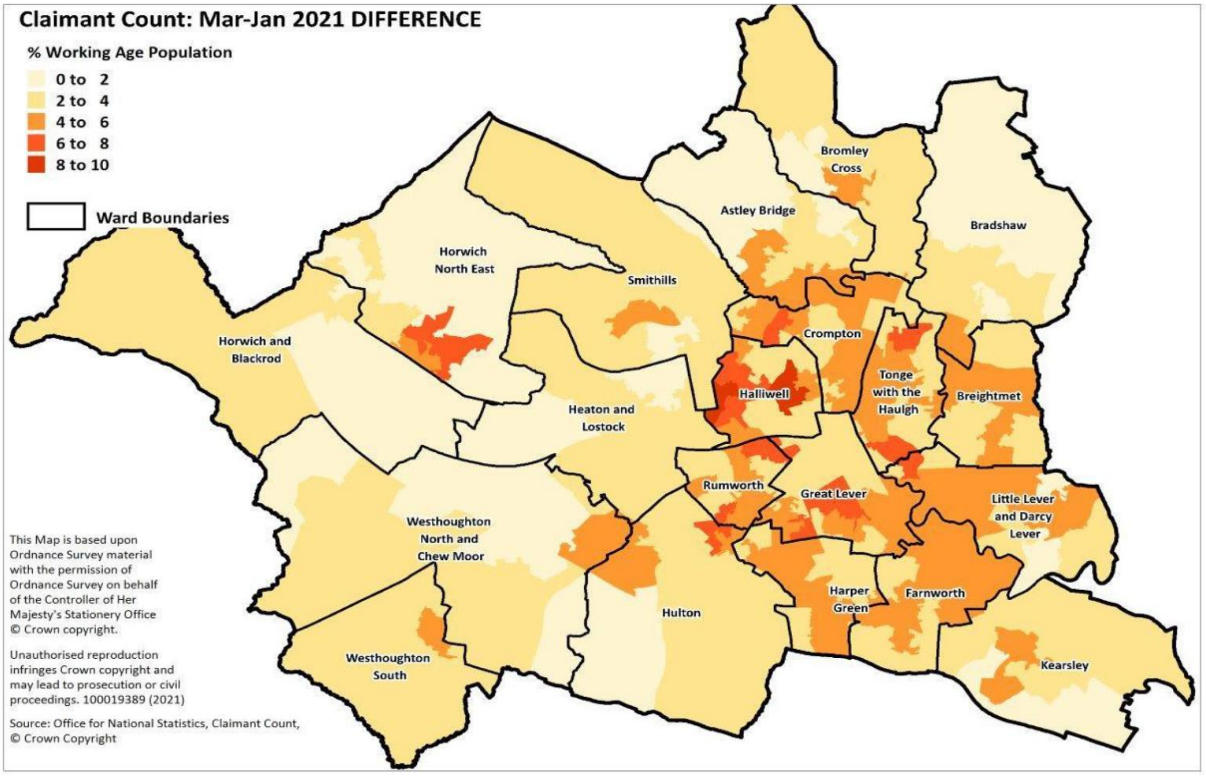


Figure 20. Difference in unemployment levels in Bolton (March 2020 and January 2021)



Business Bolton has provided a range of services to local businesses working in partnership with GM Business Growth Hub, including: Covid support Administration of Business Grants, free property relocation service; support to businesses at risk of redundancy or in financial difficulty; Ongoing one-to-one support for start-up and growth businesses; Skills Support for the Workforce focussing on those people at risk of redundancy.[106]

Poverty

Research found that compliance with the test, trace and isolate system was lower amongst those of a lower socio-economic status, those who were facing money problems and those with a child living with them.[107] One of the main reasons behind this is because of financial struggles, with the deficit in income that comes from self-isolating being too much for some people to take.[108] This has also been found to be a barrier for people from ethnic minority backgrounds as well, who are more likely to be in occupations that do not allow them to take time off and/or cannot afford to.[109] Financial support provided during the pandemic has not tended to go to those most in need and debt burdens have increased in 54% of the most deprived households compared to 31% in the least deprived households.

Further data from Public Health England also showed that during Bolton's 'Variant Of Concern' Response, there were increased rates of testing uptake amongst the most 30% deprived areas in Bolton (during May 2021). Bolton residents living in areas identified by the Index of Multiple Deprivation (2019) as among the most deprived 30% of areas nationally had the highest testing rates compared with other deprivation groups. This indicates that the response positively impacted on the most deprived localities in Bolton and reduced inequalities during the response period. Data also showed that there had been a positive impact of the response on testing access in relation to ethnicity. Pakistani and Other Asian groups saw the highest levels of testing during the response period out of all the groups in Bolton.

---

[106] Bolton Council. (2021). Economic Impact of COVID 19 and how we develop a plan for growth and resilience.
[107] The BMJ (2021) Adherence to the test, trace, and isolate system in the UK: results from 37 nationally representative surveys https://bit.ly/3p2LAT5
[108] Nuffield Trust (2021) *Tackling Covid-19: A case for better financial support to self isolate* https://bit.ly/3mTVwLN
[109] UK Government (2021) COVID-19 Ethnicity subgroup: Interpreting differential health outcomes among minority ethnic groups in wave 1 and 2, 24 March 2021 https://bit.ly/3kV9xYu

Housing

Housing is a key place through which Covid-19 is experienced and spread. Covid-19 is likely to impact our experiences in our home, our capacities to pay for our housing, and more.[110] Some of the excess risk of poor outcomes relating to Covid-19 for people from minority ethnic groups is thought to be related to housing e.g. higher likelihood of multigenerational households amongst Bangladeshi and Pakistani groups, thereby enabling easier spread of the virus within the household, combined with the higher risk of underlying health conditions as previously discussed.[111]

Since March 2020 the impact of Covid-19 has meant that the majority of the UK population has spent more time at home due to national 'stay at home' restrictions. Arguably this has resulted in further inequalities, with those most affluent in society having more indoor and outdoor space whereas those less affluent being in overcrowded conditions which has further impacted on both mental and physical health.[112] Research has found that during the pandemic, one in three households (32% or 7.6 million) in England had at least one major housing problem relating to overcrowding, affordability and/ or poor-quality housing.[97] This study also found that poor housing conditions such as overcrowding and unsafe spaces have contributed to greater spread of Covid-19 with housing instability in the private rented sector also impacting on levels of stress.

Looking at housing types, a survey for Bolton found that 63.7% of occupied dwellings are owner-occupied, 20.1% are rented from a social housing provider, 15.3% are private rented (including tied accommodation) and 0.9% are intermediate tenure dwellings.[113] It was found that many of the private rented properties were highly concentrated in location (wards around central Bolton with 21.7% of all private rented dwellings located in Deane, Derby, Daubhill and Great Lever). These areas are among those which have experienced enduring Covid transmission, i.e. areas where the case rate has remained above the national or regional average for a prolonged period[114]. It was also stated in the report that this central area of private rented properties were generally overcrowded and of poor quality, which is a factor increasing the risk of household transmission.

---

[110] Rogers D, Power A. Housing policy and the COVID-19 pandemic: the importance of housing research during this health emergency. https://bit.ly/3jTgSsr
Pages 177-183
[111] UK Government (2021) COVID-19 Ethnicity subgroup: Interpreting differential health outcomes among minority ethnic groups in wave 1 and 2, 24 March 2021 https://bit.ly/3kV9xYu
[112] The Health Foundation (2020) Better housing is crucial for our health and the Covid-19 recovery https://bit.ly/3tKcUG0
[113] Bolton Council (2016) Bolton Housing Needs Assessment 2016 https://bit.ly/3C7wX3X
[114] UKSA (2021). Guidance: COVID-19 contain framework: a guide for local decision-makers. https://bit.ly/3naWaFT

When looking at level of income by housing tenure, the assessment highlights that 51.1% of privately renting households reported receiving less than £13,000 gross per year, 29.0% receiving between £13,000 and £26,000 per year and 19.9% receiving at least £26,000 per year, therefore reflecting that the private rented sector generally accommodated lower income households.[96] In addition, 2,548 dwellings in the private rented sector in Bolton were reported to have the most serious category 1 Housing Health and Safety Rating System (HHSRS) 29 hazards, which equated to 15% of properties overall.

Stigma

Stigma has a detrimental impact upon health, and this has been observed among people from minority ethnic population groups during the pandemic; Pakistani and Bangladeshi groups face stigma on multiple fronts, and regarding religion and ethnicity, which has been felt more keenly for some due to particular narratives in the media and because of the timing of some Covid-19 control measures which coincided with cultural or religious festivals, as well as the naming of Variants Of Concern before the Greek alphabet was adopted, i.e. often called where variant was found, which is not always where it originated.[115] In addition, at the start of the pandemic there was an increase in hate crimes against people identified as Chinese because coronavirus was initially identified was in Wuhan, China. Hate crime figures showed that show that the probability of being a victim of hate crime for a Chinese person in London increased from around 3-4% prior to Covid-19, to 10% in February 2020 and to around 16% in March 2020. [116] The Chinese community in Manchester was also affected as this town has been twinned with Wuhan since 1986 with businesses in Chinatown reporting decreased footfall at the start of the outbreak.

It was noticeable that when ‘Variants Of Concern’ were named after the location in which they were identified, i.e. before the Greek alphabet was used, people from these locations felt stigmatised. One key part of Bolton’s response to Variants Of Concern was to not refer to any country, especially as we had more than one Variant identified, and this enabled Bolton Council and its partners to focus on the response and shift away from any potential stigma.

---

[115] UK Government (2021) COVID-19 Ethnicity subgroup: Interpreting differential health outcomes among minority ethnic groups in wave 1 and 2, 24 March 2021 https://bit.ly/3kV9xYu
[116] The Independent SAGE Report 33 (2021) Covid-19: Racialised stigma and inequalities https://bit.ly/3mVQvlU

Trust

There is some evidence that certain groups are less likely to understand and/ or trust messaging coming from government around Covid-19 and thus less likely to comply with guidelines. A qualitative study from the Office for National Statistics found that some participants, particularly people on a low income or people from minority ethnic population groups did not believe in the severity of Covid-19 or were unconvinced of how much difference it would make to follow public health guidance.[117] In addition, a recent study has found that whilst the majority of the public (55%) considered the scientists dealing with the Covid-19 pandemic as trustworthy, those from a less affluent or less educated background were less trusting.[118]

The Greater Manchester Covid Survey[119], which includes residents from Bolton, asks about trust in a number of contexts relating to Covid behaviour. Although not among the most common responses, issues around trust occurred across a number of questions: 10% gave the response 'Don't trust the government advice' as a reason for not regularly continuing with Covid-safe behaviours and having been vaccinated was the most frequent response at 29%. When giving reasons for not doing an activity if an NHS Covid Pass was needed, 25% said 'Don't trust the data security' and the most common response was 'Don't think they will work' at 35% (July 2021 wave). When asked reasons for not doing asymptomatic (no symptoms) lateral flow testing, 13% responded 'Don't trust the tests' accuracy' and 6% 'Don't trust the reasons for the tests'; 'Don't see the point' was the most common response at 29%. For those saying they were unlikely to get vaccinated, 35% said this was because they 'Don't trust the intentions behind wanting to vaccinate the public against coronavirus', the most common reason among people unlikely to get vaccinated was 'Vaccine isn't safe/ roll out has been too quick' at 74% (September wave).

The Greater Manchester Covid Survey[120] also found that TV was by far the most popular way to access information on coronavirus. Fewer mentioned every source in June compared with November, suggesting people were less actively seeking coronavirus information. TV was both the most and least trusted source of information, while trust in

---

[117] UK Government (2021) *ONS: Compliance with coronavirus (COVID-19) guidelines* https://bit.ly/2WQZdJf
[118] Ipsos MORI (2021) How has COVID-19 affected trust in scientists? https://bit.ly/3yln2qY
[119] GMCA. (2021). *Safely Managing Covid-19: Greater Manchester Population Survey results October 2021*. https://bit.ly/3oF9UcZ
[120] GMCA. (2021). *Safely Managing Covid-19: Greater Manchester Population Survey results June 2021*. https://bit.ly/3oF9UcZ

national government communications and the Covid-19 app seemed to have improved. This survey did not break down the answers further by demographic characteristics.

Chapter 3. The pandemic response in Bolton

Overview

The national response to the pandemic has included various restrictions on our lives. The impacts of these restrictions have been wide ranging and have not been felt equally.

Our mental health and wellbeing influences our physical health, as well as our capability to lead a healthy lifestyle and to manage and recover from physical health conditions. Women, people with a disability and young people had particular negative wellbeing impacts of the restrictions. Bolton's Big Mental Wellbeing Conversation found that most residents of Bolton were quite happy and found life reasonably satisfying but still had high levels of anxiety. Most people said they kept their wellbeing up through non-medical interventions such as hobbies, friends and family or physical activity. To make Bolton a place of positive wellbeing, better support and health services, tackling poverty, better housing, no discrimination, good facilities and events, more pleasant surroundings/ town centre and more green open spaces were most common answers.

During the restrictions, services and activities were increasingly provided online, which proved a challenge for those who were digitally excluded. This particularly affects those aged over 75, and those with a disability and on low incomes who are less likely to have a smartphone or broadband. Challenges in both providing and accessing health and care services were seen in the North West and Bolton is unlikely to have been immune from these.

Educational attainment is closely linked to health and wellbeing and ongoing life chances. More educated individuals are less likely to suffer from long-term diseases and to report themselves in poor health or suffer from common mental health conditions. Educational outcomes nationally have been worse for children and young people of a lower socio-economic status compared with those of a higher socio-economic status. In Bolton, 25% of the population live in an area that is among the 10% most deprived nationally, we should work together to ensure the disadvantage already seen is not further compounded by the pandemic. National research found significant learning loss over academic year 2020/21

due to restrictions to face to face learning, which had only partially recovered by the end of the year. The highest rate of regional absence during the first half of the 2020/21 summer term was in the North West predominantly due to an increase in cases of coronavirus in the local authorities of Bolton and Blackburn with Darwen. More in-person teaching was associated with lower levels of learning loss, so it can be suggested that during this time period a large proportion of primary and secondary pupils in Bolton may have been affected and had learning loss to a larger degree than other areas in England. Economic disadvantage was also highlighted as being as factor in learning loss. The disadvantage gap also impacts wider society, as underachievement by disadvantaged pupils costs national economies through the loss of future potential earnings. From the mid-2030s, workers in their 20s will have lower skills than they would have otherwise had. For the next 50 years, this has the potential to affect a quarter of the entire workforce and disadvantaged students are particularly at risk of falling into poverty.

Perceptions of community cohesion had a number of relevant impacts for the pandemic situation. Greater perceptions of community cohesion reduced health anxiety and stress during the first lockdown, and people who identified with their community were more likely to give and receive pandemic-related support, and were more likely to follow lockdown guidance. Emerging national research on neighbourhood level community cohesion suggests that over the pandemic period people's perceptions of neighbourhood cohesion, which had already reduced slightly, dropped further, and particularly so in more deprived areas and among people from minority ethnic backgrounds. As duration under lockdown increased, health anxiety decreased but perceived social cohesion reduced. The reductions in perceived social cohesion over time were greatest for younger adults. This suggests the need to support and foster community development to facilitate local community resilience.

During the of the restrictions, people were discouraged from travelling, resulting in lower traffic levels and a corresponding reduction in road vehicle related emissions. Although total trips have now mainly returned to their pre-pandemic levels, public transport trips are still substantially lower, suggesting a change to the way people travel. Many people want to keep on walking and cycling more often once the pandemic is over after positive experiences on bike and foot during lockdown, though the current network poses challenges and safety concerns to them doing this. An increase in walking and cycling trips

would have positive health impacts, and benefits for the climate; however a greater increase in car trips would have negative health and environmental impacts.

Physical activity levels have fallen sharply in Bolton in the latest release, and Bolton now has the lowest levels of physical activity in Greater Manchester. There are substantial inequalities between groups. Local consultation flagged barriers around public spaces in which people may be active. Recently adopted Greater Manchester Streets for All strategy and associated guidance gives more detail and support to the council in implementing these principles, to incorporate physical activity into the built environment.

Access to green space plays an important role in people's health and wellbeing and it can act as a buffer against stressful life experiences. During the height of the first Covid-19 outbreak, a private garden had a greater health protective effect where the nearest green space was more than a 10-minute walk away, showing that a private garden can partly compensate for a lack of access to public green space. There are inequalities in access to public and private greenspace across Bolton with likely impact on residents' health and wellbeing. Public green and blue spaces (examples of blue spaces include river and lakeside areas) are an asset for the whole community, particularly in areas with smaller housing stock without access to private greenspace, which are often among the more deprived areas. There is a strong legacy of public parks and gardens in many of our older residential areas, we should ensure that this is maintained and planned and natural green and blue spaces continue to be valued as our residential areas expand.

Covid vaccination is at the forefront of the UK's response to the pandemic, reducing the risk of getting seriously ill or dying from Covid, reducing the risk of catching or spreading Covid, and protecting against Covid-19 variants. It is therefore important that all residents are able to access and confidently take up vaccination, not least because of inequalities in risk of exposure to Covid, and in risk of subsequent potential severe illness and death. The first vaccine administered in Bolton was on the 15 December 2020. Vaccine coverage has been highest amongst the older population, which is in line with the vaccination rollout programme timeframe. The speed of vaccine uptake has differed by age groups, with a sharp increase in uptake in adults aged over 45. Vaccine hesitancy (where an individual reports themselves as being unlikely to take up a vaccine if it was offered) poses a significant barrier to vaccination against Covid-19, with at least 1 in 10 reporting hesitancy in the UK. Worries about side effects, and safety concerns surrounding the vaccines have

been reported to be the two biggest reasons for vaccine hesitancy within Greater Manchester. Higher rates of vaccine hesitancy have been seen among younger adults, people from more deprived areas and from ethnic minority backgrounds. In Bolton, we have been engaging with ethnic minority groups, people from disadvantaged communities, and people living with disabilities, in order to understand their concerns and their reasons for vaccine hesitancy and to work together to prevent any misinformation and inaccuracies. There has also been a significant drive in Bolton's vaccination programme to remove barriers and ensure that the programme is within our communities.

Impacts of the national Covid restrictions

The national response to the pandemic has included various restrictions on our lives. The impacts of these restrictions have been wide ranging and have not been felt equally.

Do*mestic Abuse*

Although the full impact of lockdown due to Covid-19 on domestic abuse is not completely known, between April and June 2020, there was a 65% increase in calls to the National Domestic Abuse Helpline, when compared to the first three months of that year [121]. A study conducted by Linton et al (2021)[122] found that lockdown had affected the way in which domestic abuse was reported with an increase seen in third party recording. It can be suggested that this could be due the victim not having opportunities to report this themselves due to restrictions and indicates the possibility of under reporting. This study also found that abuse by current partners as well as family members increased on average by 8.5% and 16.4% respectively over the lockdown period.

Although social isolation is an effective measure of infection control, it can lead to significant social, economic, and psychological consequences, which can be the catalyst for stress that can lead to violence[123]. It can be suggested that the combination of both isolation and the stressors that a pandemic causes such as financial worries, childcare issues etc can lead to an environment where family violence occurs. UN Women (2020)[124] has referred to the rise in violence against women during the Covid-19 pandemic and accompanying lockdowns as the "Shadow Pandemic". It is expected that

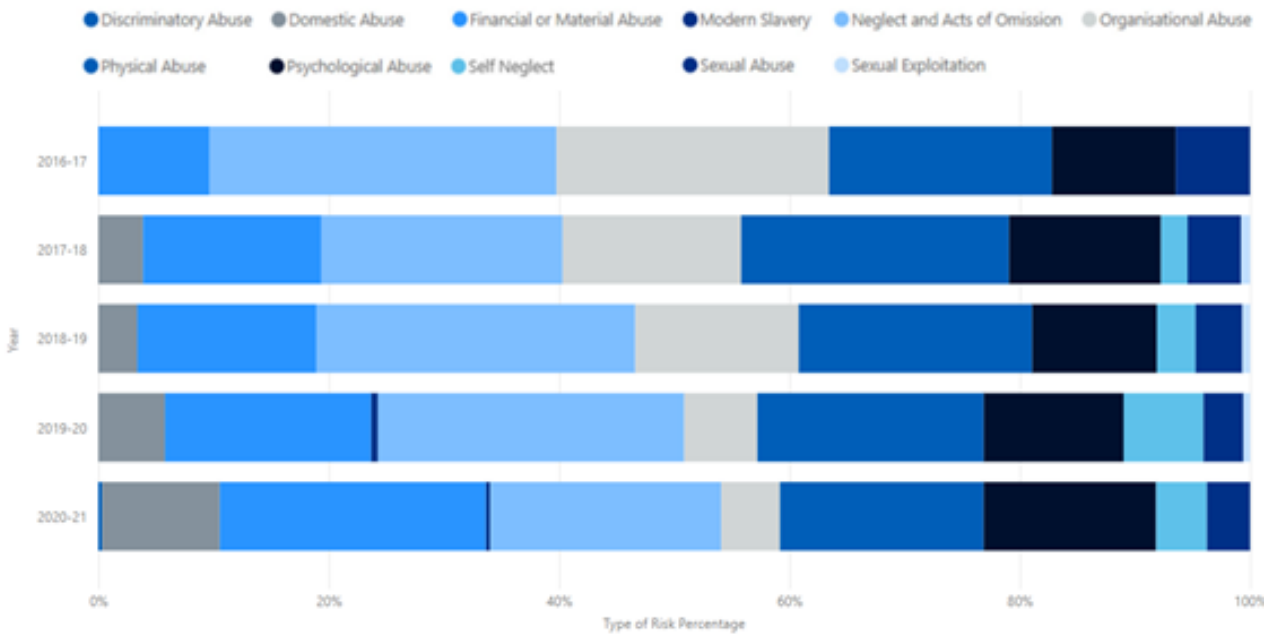
[121] UK Parliament (2021) House of Commons Library- Domestic abuse and Covid-19: A year into the pandemic https://bit.ly/3yczfOx
[122] SSRN (2021) The Role of Exposure in Domestic Abuse Victimization: Evidence from the COVID-19 Lockdown https://bit.ly/30cdx0x
[123] Usher et al (2020) Family violence and COVID-19: Increased vulnerability and reduced options for support https://bit.ly/3rWe7uS
[124] UN Women Asia and the Pacific (2020) COVID-19 and Ending Violence Against Women and Girls https://bit.ly/3ENp1a2

Bolton will have been affected by this issue throughout and after the pandemic as in other areas of the UK and will need to consider these findings moving forwards as a longer term impact of the Covid-19 pandemic.

Local data for Bolton provided by NHS Digital (2021)[125] shows the changes in safeguarding since 2016 and specifically that in the latest year, domestic abuse accounted for 10.2% of concluded Section 42 enquiries as opposed to 5.78% the previous year (See Figure 21). This figure is also higher than the overall for England which was 6.72% in 2020/21.

[125] NHS Digital (2020) Safeguarding Adults https://bit.ly/3sfEEn0

Figure 21: Proportions of type of risk for Section 42 enquiries that concluded in Bolton between 2016-2021- Taken from NHS Digital (2020)



Wellbeing

Our mental health and wellbeing influences our physical health, as well as our capability to lead a healthy lifestyle and to manage and recover from physical health conditions.[126] Nationally there are disparities by gender in terms of who took on the burden of home schooling and the effects it had; women disproportionately provided home schooling and disproportionately expressed a reduction in wellbeing related to this.[127] Women also expressed increased levels of poor mental wellbeing (depression, anxiety and loneliness) during the pandemic compared with men, which was also seen before the pandemic. [127] Research has found that older people with a disability had significantly raised levels of depression and anxiety, and lower quality of sleep and life in general during the pandemic compared to those without a disability.[128] A systematic review into the impacts of school closures on young people found negative impacts on many areas of mental health.[129] Bolton had particularly high levels of school absences compared to other areas due to Covid at certain periods such as May 2020 therefore this may be a risk moving forwards for Bolton pupils in terms of learning loss.

---

[126] Public Health England. (2019). *Wellbeing and mental health: Applying All Our Health*. https://bit.ly/3l0PnNL
[127] Scientific Advisory Group for Emergencies. (2021). *ONS: Differential impacts of the Coronavirus pandemic on men and women, 24 March 2021*. https://bit.ly/3nCM2Gu
[128] Steptoe, A. and Di Gessa, G. (2021) Mental health and social interactions of older people with physical disabilities in England during the COVID-19 pandemic: a longitudinal cohort study. *The Lancet Public Health*. https://bit.ly/3h2mSx7
[129] University College London (2021) UCL: Impacts of school closures on physical and mental health of children and young people – a systematic review, 11 February 2021 https://bit.ly/3DEK6mR

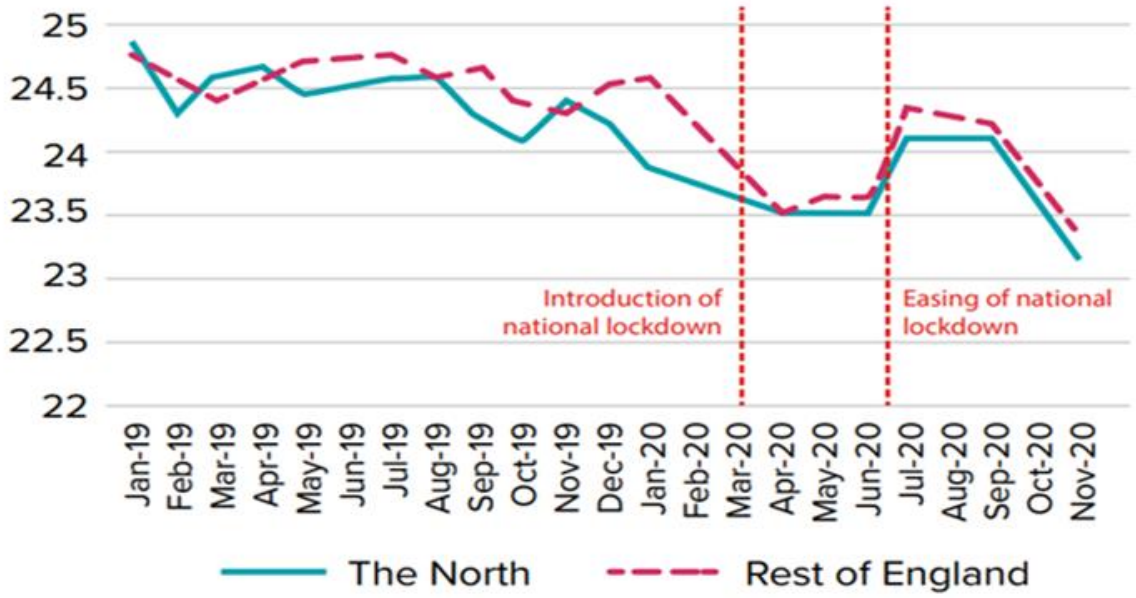
Evidence suggests that some children and young people's mental health and wellbeing has been substantially impacted due to and during the pandemic.[130] Research has found that mental health conditions in children and young people increased from 10.8% in 2017 to 16% in July 2020 across all age, sex, and ethnic groups.[131] An increase has also been seen in recorded self-harm among young people living in Greater Manchester aged 10-17.[132] With regards to education, research has found that during the first period of remote teaching in March 2020 on average wellbeing remained stable, but when schools returned after the summer holidays there was a decline in wellbeing and increase in anxiety.[133] In addition, specific population groups seemed to be disproportionately affected by the impact of the pandemic. Research has found that 36% of lower-income parents said their child's mental health and wellbeing had worsened since national 'stay at home' restrictions started when compared to more affluent families.[134] This mental health need was not entirely new. Research has found that young people (aged 17-19 years in this study) experienced emotional difficulties before the pandemic, reported higher levels of stress, conflict, loneliness and perceived lower levels of support available early in the pandemic.[135] This research also found gender differences with girls reporting more emotional problems experienced than boys. Ethnicity has also been looked at with research finding that children and young people from minority ethnic backgrounds show greater increases in depression, anxiety, self-harm and suicidal thoughts than those from a White background.[136]

There have also been regional inequalities found in population mental wellbeing. People living in the North of England reported a large decrease in self-reported mental health (See Figure 20). This study also found that the presence of minor psychiatric disorders such as anxiety and depression had increased by 55%.[137] Looking at the recorded prevalence of

[130] UK Government (2021) Covid-19 mental health and wellbeing surveillance: report https://bit.ly/3E5ZDvX
[131] NHS Digital (2020) Mental Health of Children and Young People in England, 2020 https://bit.ly/3zXwvoi
[132] Steeg S, Bojanić L, Tilston G, Williams R, Jenkins DA, Carr MJ et al. (2021). Temporal trends in primary care-recorded self-harm during and beyond the first year of the COVID-19 pandemic: Time series analysis of electronic healthcare records for 2.8 million patients in the Greater Manchester Care Record. *The Lancet, 41*, 101175.
[133] Impact Ed (2021) Pupil learning and wellbeing during the Covid-19 pandemic https://bit.ly/3ljjfEC
[134] Parent Zone (2020) Left behind in lockdown. How financial and digital divides are affecting family life during Covid-19 restrictions https://bit.ly/3k0AMC3
[135] Science Direct (2021) Adolescent psychopathological profiles and the outcome of the COVID-19 pandemic: Longitudinal findings from the UK Millennium Cohort Study https://bit.ly/2Xeu4zt
[136] Make a Difference (2021) How Covid-19 is Affecting the Mental Health of Young People in the BAME community https://bit.ly/3C0l9R7
[137] Munford, L., Khavandi, S., et al, (2021). A year of COVID-19 in the North: Regional inequalities in health and economic outcomes https://bit.ly/3FHptXm

depression (aged 18+) in 2019/20, Bolton had a rate of 13.4% – lower than the North West region figure of 14% but higher than England at 11.6%.[138]

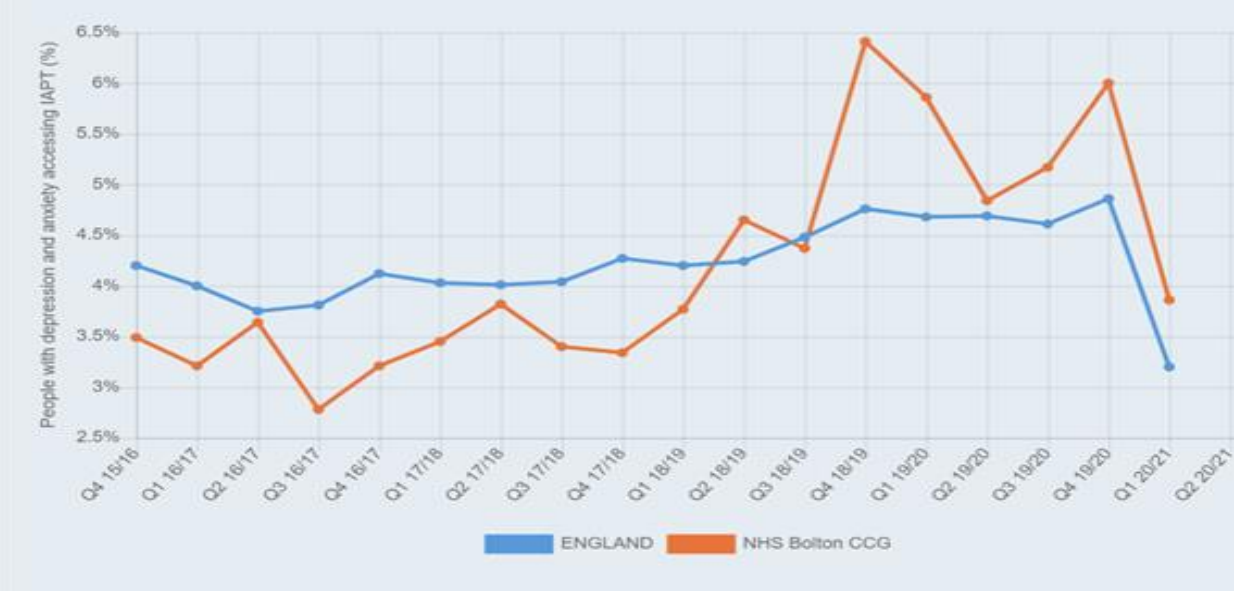
Figure 22. Trends in self-reported metal health in the North and the rest of England (General health Questionnaire) (January 2019 to November 2020)[139]



Following the national restrictions in Quarter 1 2020/21, Bolton had a higher proportion than England of people with depression and anxiety accessing IAPT services to support them with their mental health [140] (See Figure 21).

[138] PHE (2021) Fingertips Mental Health and Wellbeing JSNA https://bit.ly/3ELWSQn
[139] NHSA (2021) A year of COVID-19 in the North: Regional inequalities in health and economic outcomes https://bit.ly/32TbHml
[140] Royal College of Psychiatrists (2021) Access to IAPT services for people with depression and/or anxiety disorders https://bit.ly/3l4ea3v

Figure 23. People with depression and anxiety accessing IAPT services in England and Bolton (2015-2021)



Bolton's Big Mental Wellbeing Conversation[141] took place between July and October 2021. It found that Bolton residents surveyed reported they were quite happy, (only 24% had a low level of happiness), found life reasonably satisfying (23% low level), and worthwhile (22% low level), but still had fairly high levels of anxiety, with 71% claiming to have high or very high anxiety. Most people said they stay well day to day through non-medical interventions. Popular choices are some form of non-physical activity (such as watching TV/ films, reading, listening to music, hobbies) with 77% doing this; contact with friends and family at 73%; physical activity at 70% (exercise, sport, walking or other physical activity); getting into the outdoors at 41%; and taking time out to relax or sleep at 42%. Things that were most likely to be the cause of poorer mental wellbeing were: Family worries (45%), tiredness / lack of sleep (37%). Whilst it is clear that better health services, could improve people's mental wellbeing (52% highlighted support from GP and / or therapy / counselling), there are equally things closer to home that would greatly help people's wellbeing, particularly more contact with family and friends (52%). Around a third of residents said the end of Covid-19 would also greatly improve things for them! To make Bolton area a place of positive wellbeing, the most frequent suggestions were: better support and health services, tackling poverty, better housing, no discrimination, good facilities and events, more pleasant surroundings/ town centre and more green open spaces.

[141] Bolton Council. (2021). *Bolton's Big Wellbeing conversation: Report of findings*.

Access to health and social care services

Older people aged over 75 are much more likely to be digitally excluded, which has been a particular challenge during the pandemic with services and activities increasingly provided online. [142] There are other inequalities in access to technology as well: those with a disability and on low incomes are less likely to have a smartphone or broadband, which proved increasingly challenging for families with school/ collage aged children, especially if they could not afford the data tariff.[143] Areas where people from certain minority ethnic groups are more likely to live, such as London and the North West for Pakistani and Bangladeshi people, have seen reduced access to health services due to pressures on primary and secondary care.[144]

A systematic review found that during periods of school closures, health service use by young people was lower, including presentation at A&E and admission to hospital, and referrals to social care were also lower. The consequences of this include needs going unaddressed and worsening in inequalities affecting those from more deprived areas. [145] Nationally, access to elective healthcare during 2020 was lower in more deprived areas, because those areas were harder hit by the Covid-19 pandemic and subsequent strain on health services.[146] The North West saw the biggest reduction in access at 31% compared to the previous year.[147]

There have been decreases in numbers accessing social care, with impacts on those that need care and their carers, as well as safeguarding concerns for children and young people.[145] Consultations for the under 11s have had the most sustained fall (23% below 4-year average); the 11-19 age group has also seen sharp falls (13.4% below 4-year average), which were most pronounced when national 'stay at home' restrictions were in place.

Amongst older people, the impact was much less significant, with a 7.6% drop in consultations in 2020 relative to the 4-year average. The fall in consultations amongst

---

[142] Age UK. (2021). *Digital inclusion and older people – how have things changed in a Covid-19 world?* https://bit.ly/3806ybq
[143] Ada Lovelace Institute. (2021). The data divide: Public attitudes to tackling social and health inequalities in the COVID-19 pandemic and beyond. https://bit.ly/2Wd1opF
[144] Scientific Advisory Group for Emergencies. (2021). *COVID-19 Ethnicity subgroup: Interpreting differential health outcomes among minority ethnic groups in wave 1 and 2*. https://bit.ly/2UwWmE2
[145] University College London. (2021). Impacts of school closures on physical and mental health of children and young people – a systematic review. https://bit.ly/3sGjAo4
[146] The Health Foundation. (2021). Longer waits, missing patients and catching up: how is elective care in England coping with the continuing impact of COVID-19? https://bit.ly/381uhYB
[147] The Health Foundation. (2021). *Unequal pandemic, fairer recovery: the COVID-19 impact enquiry report*. https://bit.ly/3gew0hL

those with pre-existing conditions was much smaller than for those without such conditions, particularly in older age groups. [148] The pandemic has significantly increased older people's need for social care. [149] Similar patterns of changes in service usage and need are expected in Bolton and will be important to consider to inform future planning.

The COVID-19 pandemic has especially had a negative impact on older care home residents, their families and workforce. Despite which, we have seen some incredible examples of compassion, commitment, teamwork, innovation, resilience, and partnership working in the face of significant challenges.

Across the world care homes became one of the first settings to experience the impact and challenges Covid has brought, with a disproportionately high death rate in the first wave, and being the first settings to introduce mandatory vaccinations for staff.

In Bolton we have made it a priority to maintain regular, consistent, and factual contact with all our community providers. At the same time partner agencies have worked hard to foster good relationships between care homes. Locally we have enabled this through regular monthly webinars with a range of professions; monthly newsletters; single point of access via our local Quality Assurance Team to raise issues; speedy passporting of grant funding to homes when available, and many more examples. These relationships have allowed swift and timely responses to care homes that have gone into an outbreak, particularly during the Delta wave of infections in early 2021, which again had such a negative impact on care home residents and their workforce.

One of the most challenging areas remains supporting the general wellbeing of residents and the workforce. This includes the significant restrictions on relatives visiting residents prior to the roll out rapid lateral flow testing, and most importantly, the vaccination programme of all residents in early 2021.

Despite this, and the need to protect our most vulnerable residents, frequent care home outbreaks and national restrictions on the number of visitors has persisted. However, homes have developed a range of responses, from the use of I-Pads to allow regular

[148] SAGE. (2021). *Direct and Indirect Health Impacts of COVID-19 in England: Short Paper*. https://bit.ly/39k9ssf
[149] Age UK. (2021). New analysis finds the pandemic has significantly increased older people's need for social care. https://bit.ly/3pdCFN0

contact; purpose built visiting pods; supporting outdoor visiting in marquees and supporting families through the emerging changes in national policy related to testing and visiting. It has (without doubt) been an incredibly challenging and difficult time for care home staff, residents and their families. However, the sector has also shown great spirit and resilience, tenacity, and a dedication to ensure that the most vulnerable members of society remain safe, well and protected

Safeguarding adults

NHS Digital (2020)[150] provides the latest statistics from the Safeguarding Adults Collection (SAC). In terms of Bolton trends, it can be seen that overall Bolton had a higher rate per 100,000 adults than England in relation to total safeguarding concerns and Section 42 and other enquiries reported. It should be stressed that there has been ongoing work since 2017/18 to improve the conversion from concerns to enquires and the implementation of the safeguarding team has driven the enquiries up.

Figure 24. Safeguarding Adults in Bolton 2016-2021

Particular impacts have been seen concerning people with dementia. A recent survey conducted by the Alzheimer's Society (2020)[151] found that for people living with dementia, the most common symptoms they reported as having increased since national 'stay at

[150] NHS Digital (2020) Safeguarding Adults https://bit.ly/3sfEEn0
[151] Alzheimer's Society (2020) The impact of COVID-19 on People Affected by Dementia https://bit.ly/3s4WPfc

home' restrictions were difficulty concentrating (48%), memory loss (47%) and agitation/ restlessness (45%). This survey also found that almost half of people with dementia felt that the pandemic has had a negative impact on their mental health with 56% saying they felt lonelier. Restrictions to social functions (such as support groups) was also reported as having a negative impact on their confidence. Also important to note was the effect of the pandemic on carers of those living with dementia with 44% stating that it has had a strong negative impact on their mental health, added strain in their relationship with their loved one (42%), and left them struggling with caring for themselves and their loved one (22%).[146]

Figure 25. Dementia related healthcare activity

Dementia Related A&E Attendances (over 65yrs)
Latest: 288 A&E Attendances for Dementia (including Delirium and Acute Confused State) at Bolton FT in the 12 months to July 2021
Baseline: 225 A&E Attendances for Dementia (including Delirium and Acute Confused State) at Bolton FT in the 12 months to July 2020
Variance: 28% increase (+63 additional)

Dementia as a proportion of all MH related A&E attendances (over 65yrs)
Latest: 36% 288 (dementia related) of 794 (all mental health related) A&E attendances at Bolton FT in the 12m to July 2021
Baseline: 37% 225 (dementia related) of 610 (all mental health related) A&E attendances at Bolton FT in the 12m to July 2020

Weighted rate per 100 individuals on the dementia register (over 65yrs)
Latest: 13.0 (per 100) A&E Attendances for Dementia (including Delirium and Acute Confused State) at Bolton FT in the 12 months to July 2021
Baseline: 10.4 (per 100) A&E Attendances for Dementia (including Delirium and Acute Confused State) at Bolton FT in the 12 months to July 2020
Variance: 26% increase

Dementia A&E attends (over 65yrs) as a proportion of all age mental health related A&E attendances
Latest: 5.1% 288 (dementia related) of 5,606 (all mental health related) A&E attendances at Bolton FT in the 12m to July 2021
Baseline: 3.6% 225 (dementia related) of 6,196 (all mental health related) A&E attendances at Bolton FT in the 12m to July 2020

In addition, looking at emergency admissions breakdown (Table 1), there has been a notable change in dementia admissions compared to pre-pandemic levels. As can be seen, the number admitted with a primary diagnosis of ‘delirium’ increased during 2020/21 compared to the previous year with forecasts predicting further increases in total emergency admissions [152].

[152] Taylor, J. (2021). *Total Dementia Related Emergency Admissions Dashboard*. Bolton CCG

Table 1 Emergency admissions summary by most dominant primary (Dementia related) diagnosis

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
F00 Dementia in Alzheimer disease	1	2	4	9	14	6	6	2
F01 – Vascular dementia	86	65	61	67	66	66	26	14
F02 – Dementia in other diseases classified elsewhere	2	0	3	4	14	5	8	2
F03 – Unspecified dementia	110	101	104	78	112	119	36	33
F05 – Delirium, not induced by alcohol and other psychoactive substances	203	245	289	282	300	397	453	255
F22 – persistent delusional disorders	1	4	2	3	7	5	3	3
G30 – Alzheimer disease	41	28	39	41	39	71	30	17
Total dementia related admissions	444	445	502	484	552	669	562	326

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Dementia	199	168	172	158	206	196	76	51
Delirium	204	249	291	285	307	402	456	258
Alzheimer's	41	28	39	41	39	71	30	17
Total dementia related admissions	444	445	502	484	552	669	562	326

Education and safeguarding children

Educational attainment is intrinsically linked to health and wellbeing. More educated individuals are less likely to suffer from long-term diseases and to report themselves in poor health or suffer from mental disorders such as depression or anxiety. [153] Educational outcomes nationally have been worse for children and young people of a lower socio-economic status compared with those of a higher socio-economic status. [154]. In Bolton, 25% of the population live in an area that is among the 10% most deprived nationally, we need to work together to ensure the disadvantage already seen is not further compounded by the pandemic. Bolton schools remained open through the pandemic period for vulnerable children and children of keyworkers, in recognition of the vital role these settings play broader than education, for example in relation to safeguarding.

School absences due to Covid-19 and learning loss

Learning loss refers to the months of learning that pupils are estimated to be behind following the Covid-19 pandemic. A recent study conducted by the Education Policy Institute and Renaissance Learning[155] focused on pupils' learning and how this had changed throughout the last academic year (2020/21) with restrictions to in-person teaching periods occurring in March 2020 and March 2021. The research found that there

[153] Public Health England (2021) *Research and analysis; Chapter 6: social determinants of health* https://bit.ly/3jHUbY1
[154] The Health Foundation (2021) *Unequal pandemic, fairer recovery. The COVID-19 impact inquiry report* https://bit.ly/3jNNqEp
[155] Department for Education (2021) Understanding Progress in the 2020/21 Academic Year -Findings from the summer term and summary of all previous findings October 2021 https://bit.ly/3nz5W4V

were clear trends of learning loss during the autumn term 2020 due to lack of in-person learning earlier that year. For primary aged children, it was found that an estimated 1.8 months of learning in reading had been lost which recovered to 0.9 by the summer term. For mathematics in the same group this gap was wider with an estimated 3.6 months of learning loss at the autumn term with a recovery to 2.2 months by the end of the summer term. For secondary aged children (in reading), this recovery was smaller with a loss of 1.5 months during the autumn term and 1.2 by the summer term. These findings show that both primary and secondary aged pupils had learning loss at the start of the 2020/21 academic year due to the pandemic impacts, which had partially recovered but to varying degrees by the summer term of that year.

Learning loss due to the lack of in-person learning was highlighted as being a factor with correlations found (for both reading and mathematics) between the proportion of days that pupils were absent from school and estimates of learning loss. Therefore the more pupils were in school receiving in-person teaching, the smaller the learning loss. The pandemic has led to significant disruption in education across the world. It has been stated that 8.8 million schoolchildren in the UK have experienced severe disruption to their education, with prolonged school closures and national exams cancelled for two consecutive years.[156]

Looking at regions in England during the first half of the 2020/21 summer term, the highest rate of pupil absence was 4% in the North West on 27 May, which was mainly due to an increase in cases of coronavirus in the local authorities of Bolton and Blackburn with Darwen[157]. In Bolton, 21% of primary and 31% of secondary pupils were reported as absent for Covid-19 related reasons on 27 May, based on response rates of 58% and 70% respectively. During this data period, 22.2% of students in Bolton were self-isolating due to contact inside the setting.[158]

As noted in the study conducted by the Education Policy Institute and Renaissance Learning, more in-person teaching was associated with lower levels of learning loss, so it

---

156 BMJ (2021) *Closing schools is not evidence based and harms children* https://bit.ly/3zJQLd2
157 UK Government (2021) Attendance in education and early years settings during the coronavirus (COVID-19) outbreak https://bit.ly/2WUyqMb
158 UK Government: Attendance in education and early years settings during the coronavirus (COVID-19) pandemic https://bit.ly/3JQhgTt

can be suggested that during this time period, a large proportion of primary and secondary pupils in Bolton may have been affected and had learning loss to a larger degree than other areas in England. Rates of confirmed Covid-19 cases in Bolton compared to other Greater Manchester areas found that Bolton had the highest overall rate per 1,000 for school age children (5-16 years) with 119.1 per 1,000 population which was also higher than the England average (see Table 2).[159]

Table 2. Rate of confirmed cases of Covid-19 in school age children in Greater Manchester over the course of the 2020/21 academic year[160] Rate per 100,000 population based on ONS mid-2020 population estimate

	Cases age 5-10 years	Cases aged 11-16 years	Cases total	Rate age 5-10 years	Rate age 11-16 years	Rate total
Bolton	2,033	3,514	5,547	83.9	157.1	119.1
Bury	1,147	2,102	3,249	76.1	145.9	110.2
Manchester	3,365	5,481	8,846	76.4	144.5	108.0
Oldham	1,585	2,860	4,445	77.6	144.9	110.6
Rochdale	1,585	2,452	4,037	84.0	140.5	111.1
Salford	1,456	2,259	3,715	71.4	126.5	97.2
Stockport	1,604	2,396	4,000	71.7	111.9	91.3
Tameside	1,275	2,369	3,644	70.5	144.8	105.8
Trafford	1,319	2,223	3,542	66.0	113.3	89.4
Wigan	18,77	3,214	5,091	78.4	135.6	106.9
GM	17,246	28,870	46,116	75.8	136.9	105.2
NW Region	36,661	62,241	98,902	66.8	119.4	92.4
England	199,129	360,069	559,198	46.9	90.1	67.9

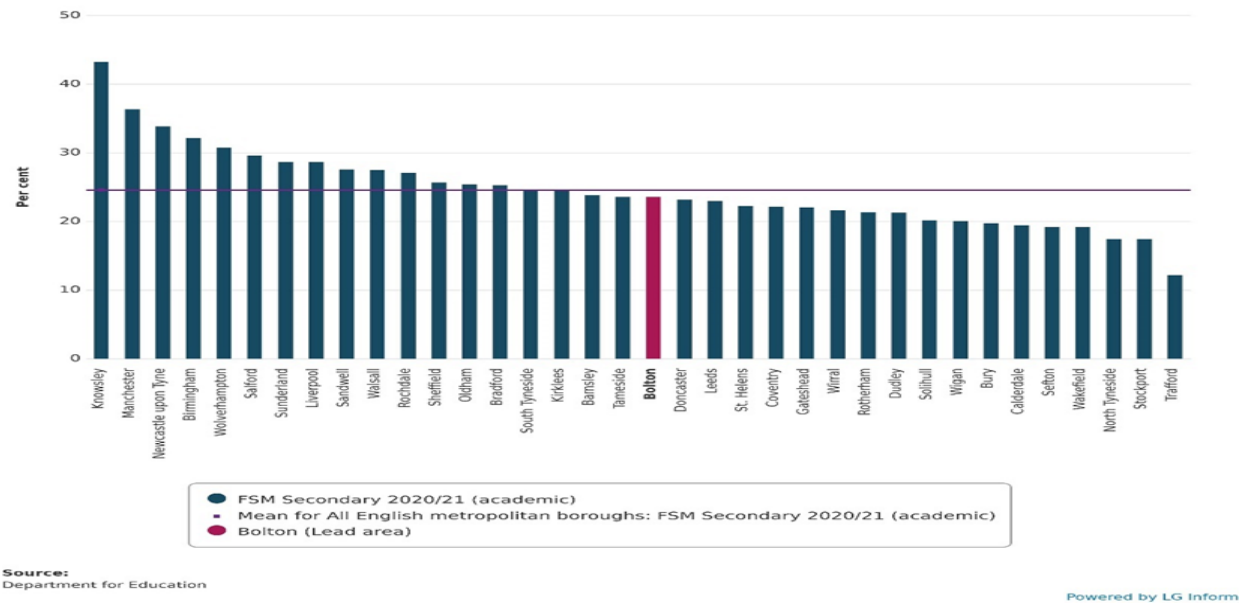
This study by the Education Policy Institute and Renaissance Learning also found regional differences in the levels of learning loss with Northern regions such as North East and Yorkshire and Humber having the greatest learning loss for reading in both primary and secondary aged children. Economic disadvantage was also highlighted as being as factor in learning loss with pupils from disadvantaged backgrounds (identified as those eligible for free school meals during some point over the last six years) experiencing higher levels of learning loss as a result of Covid-19 than did more affluent pupils (for both primary and secondary). Previous research has found that, across the country, persistently disadvantaged children (on free school meals >80% of their school life) were on average 22 months behind their more advantaged peers and this has not improved since 2011.[161]

[159] Public Health Knowledge and Intelligence Team, Manchester City Council taken from UKHSA Situational Awareness Explorer (2021)

[160] Public Health Knowledge and Intelligence Team, Manchester City Council (2021)
[161] Education Policy Institute (2020) *Education in England: Annual Report 2020* https://bit.ly/3gZAjhr

In Bolton, during the academic year 2020/21, 23.6% of secondary school pupils were eligible and/or claiming for free school meals[162] therefore from the estimates presented in the study, it can be suggested that this cohort could have lost 2.4 months in reading at the end of the summer term compared to 0.8 months for non-disadvantaged pupils.

Figure 26. Percentage of school pupils secondary with free school meals (2020/21 - academic) for Bolton



The disadvantage gap also impacts wider society, as underachievement by disadvantaged pupils costs national economies through the loss of future potential earnings.[163] Research has found that 13 cohorts of students have been affected by school closures, so from the mid-2030s, workers in their 20s will have lower skills than they would had otherwise. For the next 50 years, this has the potential to affect a quarter of the entire workforce and disadvantaged students are particularly at risk of falling into poverty.[164]

Community

Perceptions of community cohesion had a number of relevant impacts for the pandemic situation. Emerging national research on neighbourhood level community cohesion suggests that over the pandemic period people's perceptions of neighbourhood cohesion, which had already reduced slightly from 2015-2017, dropped further, and particularly so in more deprived areas and among people from Pakistani, Bangladeshi, Other, and Black

[162] Department for Education (2021) Schools, Pupils and their Characteristics https://bit.ly/2WPQB5u
[163] UK Parliament (2020) *COVID-19 and the disadvantage gap* https://bit.ly/3BwbWQi
[164] Royal Society Delve Initiative (2021) *Balancing the Risks of Pupils Returning to Schools* https://bit.ly/3BGttFm

backgrounds.[165] A further study [166] examined perceptions of community cohesion together with health anxiety and stress. Greater perceptions of community cohesion reduced health anxiety and stress over the first wave of the pandemic. As duration under lockdown increased, health anxiety decreased but perceived social cohesion reduced. The reductions in perceived social cohesion over time were greatest for those aged under 45. This study found anxiety was not evenly spread - for example, students reported some of the highest stress and health anxiety scores while those retired overall displayed the lowest; rates of health anxiety amongst those working in caring, leisure and other service occupations were more than three times higher than amongst those working as managers, directors and senior officials. Another study [167] found people who identify with their community were more likely to give and receive pandemic-related support, and were more likely to follow lockdown guidance. This suggests the need to support and foster community development to facilitate local community resilience. local responses often take place at three levels. [168]:

- Individual – including neighbourhood self-organising mutual aid networks often with specific concerns for vulnerable people
- Formal voluntary and community sector – including direct service provision and reorganisation of local infrastructure
- Local system – health services, social care, housing, etc.

Throughout the pandemic, community involvement and engagement has been at the heart of the local response in Bolton. When restrictive Contain measures were introduced many of our residents stepped up as volunteers to support the most vulnerable and shielding groups by assisting with advice and information and delivering food parcels and vital medicine supplies. Local groups and mutual aid networks have had to work very differently throughout the pandemic, moving to virtual platforms to continue to offer much needed support and services throughout Covid and into the future. New alliances and groups started to emerge and were empowered through our Community Champions programme

---

[165] Borkowska M, Laurence J. (2021). Coming together or coming apart? Changes in social cohesion during the Covid-19 pandemic in England. *European Societies, 23 (sup1)*, S618-S636. https://bit.ly/3gewvs4

[166] Svensson SJ, Elntib S. (2021). Community cohesion during the first peak of the COVID-19 pandemic: A social antidote to health anxiety and stress. *Journal of Applied Social Psychology, 51(8)*, p793-808. https://bit.ly/3sKS7BL

[167] Stevenson C, Wakefield JRH, Felsner I, Drury J, Costa S. (2021). Collectively coping with coronavirus: Local community identification predicts giving support and lockdown adherence during the COVID-19 pandemic. *British Journal of Social Psychology*, early view. https://bit.ly/3gg0AYC

[168] Rippon S, Bagnall A-M, Gamsu M, South J, Trigwell J, Southby K. (2020). Towards transformative resilience: community, neighbourhood and system responses during the COVID-19 pandemic. *Cities and Health, Special Issue: COVID-19*. https://bit.ly/2XH3Vtd

to engage with our different and diverse communities across Bolton; cascading key public health and wellbeing messages around testing, vaccination and stay at home guidance.

Community Champions are people who live and work across the borough and bring with them the insight and knowledge around their communities. This scheme aims to help keep everyone safe in Bolton by making sure that we can get the most accurate, and up-to-date information, advice and guidance to all our residents. The Champions will help us to talk and engage with the groups most at risk from the virus including digitally excluded residents, people with disabilities and people from diverse backgrounds. They provide vital feedback on some of the challenges and barriers local people have faced and helping us get the messaging and response right. The roles also recognise the many unsung heroes in Bolton and we provide formal training and a support network for them to enhance the great work they do[169].

Bolton's Response to the Variants of Concern, described further on page 73, is an example of an effective approach taken in partnership with the community. Bolton's figures remained consistently low following this time and the "Team Bolton" spirt has been encapsulated in the community response since. This strength-based approach, focussing on what skills and resources communities have rather than solely on what they lack, will be used to create a long lasting legacy program and create a system wide approach to reduce health inequalities in Bolton.

As part of the borough's Vision 2030 for an Active, Connected and Prosperous Bolton, we want to harness and build on the collective social action and energy that emerged as part of the response and start to redefine our relationship and trust with residents and communities. The impact of the pandemic has highlighted many health, social and economic inequalities and challenges that exist across the Bolton. However, it has also emphasised the importance of 'people and place' and that the way to address these is by creating the conditions where residents, neighbourhoods, services, and resources can come together to create a sense of identify and purpose. This may be around maximising the use of local public spaces to create places for chat and play, or nurturing small voluntary groups and mutual aid networks to spot areas in their neighbourhoods where Streets for All and active travel approaches will bring broader benefits. Working in this way

[169] Bolton Council. (2021). *Community Champions: flying the flag for Bolton communities*. https://bit.ly/3GPpWar

will put local people at the forefront of solution focussed thinking that supports inclusive growth in communities and places.

There is great potential for rethinking and developing the relationship of communities and the local public sector in the light of Covid-19, providing opportunities for improving system resilience. We will be able to use this learning again in our response to the climate emergency. We suggest these opportunities include: Taking deliberate actions to support (local) system reflection and review – toward transformative resilience capacity (e.g. Local Authorities commissioning a review of community led and sector agency collaborations during lockdown); Taking steps to further tackle inequalities and create action to support marginalised communities (e.g. encouraging public evidence-based debate through local Fairness Commissions); Developing evidence-based approaches to support community organising and citizen-led action (e.g. developing clearer frameworks that take an inclusive approach to community-led and state-led action). [170] This also links to wider decision making – ensuring all voices are heard, and ensuring equalities impacts are fully taken into account.

Transport

During the of the restrictions, people were discouraged from travelling, resulting in lower traffic levels and a corresponding reduction in road vehicle related emissions. [171] As restrictions eased, an increase in travel followed. At Greater Manchester level, the pattern of transport usage as we have moved out of restrictions suggests that there has been a longer lasting change to travel behaviour. With total trips less than 3% below pre-pandemic typical levels, trips on public transport are still 40-50% below. This would suggest that there has been a change to car, cycling or walking.[172]

A Greater Manchester Covid-19 recovery survey has found almost half (47%) of respondents want to keep on walking and cycling more often once the pandemic is over after positive experiences on bike and foot during lockdown. Transport for Greater Manchester's (TfGM) network intelligence data has also shown that cycle trips are up 25% on the equivalent period last year (March 2020), and up further than that in some

[170] Rippon S, Bagnall A-M, Gamsu M, South J, Trigwell J, Southby K. (2020). Towards transformative resilience: community, neighbourhood and system responses during the COVID-19 pandemic. *Cities and Health, Special Issue: COVID-19*. https://bit.ly/2XH3Vtd
[171] Air Quality Expert Group. (2020). Estimation of changes in air pollution emissions, concentrations and exposure during the COVID-19 outbreak in the UK. Defra. https://bit.ly/380fVrA
[172] TfGM. (2021). Transport Network Performance Update. https://bit.ly/3yeXDh7

locations, including Chorley New Road in Bolton, where it was up 167%. The number of walking trips was slightly reduced (10% decrease), however, considering lockdown restrictions and local high streets being largely closed, this data shows confidence in making journeys on foot and by bike across the city-region. [173] Only 31% of Greater Manchester residents agree that "Greater Manchester's transport network encourages you to walk or cycle as part of your trips". Satisfaction of people who walk feeling safe from traffic during the day is 75% and this drops to just 51% of people who cycle. [174] Since 2020 central government has released policy documents [175], statutory guidance [176], and funding [177] to support local authorities in putting in place infrastructure to support residents making more of their trips by active travel.

An increase in walking and cycling trips would have positive health impacts, and benefits for the climate; however a greater increase in car trips would have negative health and environmental impacts. The largest source of CO_2 emissions for Bolton is transport followed by domestic usage. Emissions on minor roads are responsible for the largest part of the overall transport emissions and have risen in recent years. Transport overall has shown only small reductions, although as other large contributors have fallen, transport now makes up a larger proportion of total emissions in Bolton than in any previous year for which this data is available. [178] There are many existing inequalities associated with transport, associated with age, gender, ethnicity, socioeconomic status, caring status. [179] A failure to lock in greater opportunities for walking and cycling seen during the pandemic and allowing increased levels of private car journeys risks exacerbating these inequalities. Bolton Council was successful in securing funding for enhanced active travel measures under both the Emergency Active Travel Fund and tranche 1 of the Active Travel Fund. It is recommended that the council continues to pursue and implement such infrastructure measures supported by non-physical measures such as promotional activity, buddying or encouragement by similar others to support uptake amongst groups who may face greater challenges.

---

[173] TfGM. (2021). Half of respondents to Greater Manchester survey open to walking and cycling more post-pandemic. https://bit.ly/3gfAh4A
[174] TfGM. (2021). GMTC *Walking and Cycling Update and Forward Look Repor*t. https://bit.ly/3szIdTg
[175] DfT. (2020). *Gear change: a bold vision for cycling and walking*. https://bit.ly/3n18fhm
[176] DfT. (2021). Statutory guidance: Traffic Management Act 2004: network management to support recovery from COVID-19 https://bit.ly/38BCSSa
[177] DfT. (2020). *Active travel fund: local transport authority allocations*. https://bit.ly/3mZzY20
[178] Department for Business, Energy and Industrial Strategy. (2021). *UK local authority and regional carbon dioxide emissions national statistics: 2005 to 2019*. https://bit.ly/3Ewvu8W
[179] Bolton Council (2021). Equality impact assessment: Active travel schemes – overall policy.

Physical activity

Physical activity levels have fallen sharply in Bolton between 2018/19 and 2019/20. At 56%, Bolton now has the lowest levels of physically active adults in Greater Manchester (Figure 27). There are substantial inequalities in physical activity levels, so we can expect this figure to be even lower among some of our communities. At Greater Manchester level there is nearly a 20 percentage point difference in proportion of adults who are active at the recommended level between the most and least deprived areas (49% most deprived; 68% least deprived); with increasing age people become less physically active, and disabled people are much less likely to be physically active (43% of disabled people; 63% non disabled people).[180]

During the restrictions, people were encouraged not to travel, so walking and cycling for transport reduced, although nationally, there was a boom in walking and cycling for leisure. Bolton showed less walking and cycling for all purposes than both Greater Manchester and England (Figure 28). It was possible to separate out walking for transport and leisure purposes; a sharper drop was seen in walking for transport, and less of an increase in walking for leisure than in Greater Manchester or England (Figure 29).

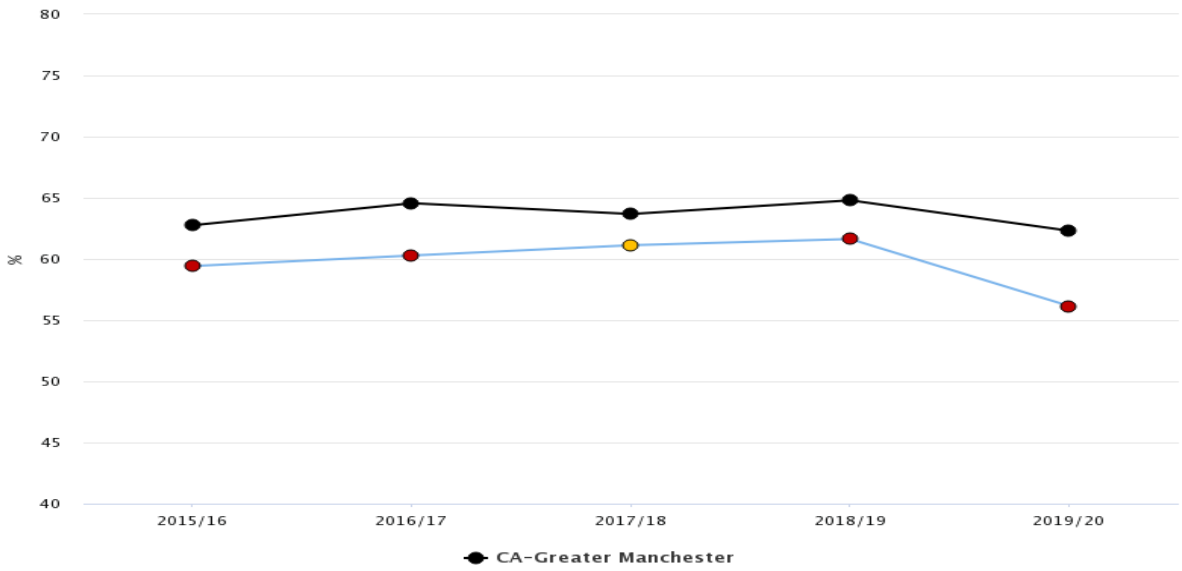
Engagement work undertaken as part of Bolton's physical activity Local Pilot scheme[181] identified walking was the most popular form of physical activity across all age groups, at all times, with family, friends and dogs! Cost and closeness to home were the biggest barriers to physical activity for most people, followed by perceptions of not liking sports or physical activity and parental and caring responsibilities which impacted on how people could engage. Friends, family and fun were the biggest enablers. There were a number of considerations around safety, access, availability of public toilets, inadequate lighting, uneven pavements, refreshment provision and anti-social behaviour which were flagged as barriers around public spaces through the engagement. Buddy systems were also suggested to help people have someone to be active with and enable the social aspects of physical activity.

NICE guidance[182] highlights the importance of improving the built environment to enable people to be physically active, ensuring all people can move along and across streets and

[180] Sport England. (2021). *Active Lives, May 2020-21*. https://bit.ly/3yz96K1
[181] Bolton CVS. (2019). *Bolton's Local Pilot: Community engagement and insight report. V3.1*
[182] NICE (2018). Physical activity and the environment: NICE guideline NG90.

in public open spaces (including natural green and blue spaces); that destinations are easily accessible by walking, cycling and public transport; and ensuring pedestrians, cyclists and users of other modes of transport that involve physical activity are given the highest priority when developing or maintaining streets and roads. Recently adopted Greater Manchester Streets for All[183] strategy and associated guidance gives more detail and support to the council in implementing these principles.

Figure 27. Physically active adults in Bolton compared to Greater Manchester (2015-2020) [184]



[183] TfGM. (2021). *Streets for All Strategy*. https://bit.ly/3lOiV1y
[184] PHE. (2021). *Fingertips physical activity dashboard*: https://bit.ly/3lobPR0

Figure 28. Walking and cycling in Bolton, for transport or leisure at least once in the previous 28 days [185] *pandemic time is included in waves May 2019-20 & Nov 2019-20.*

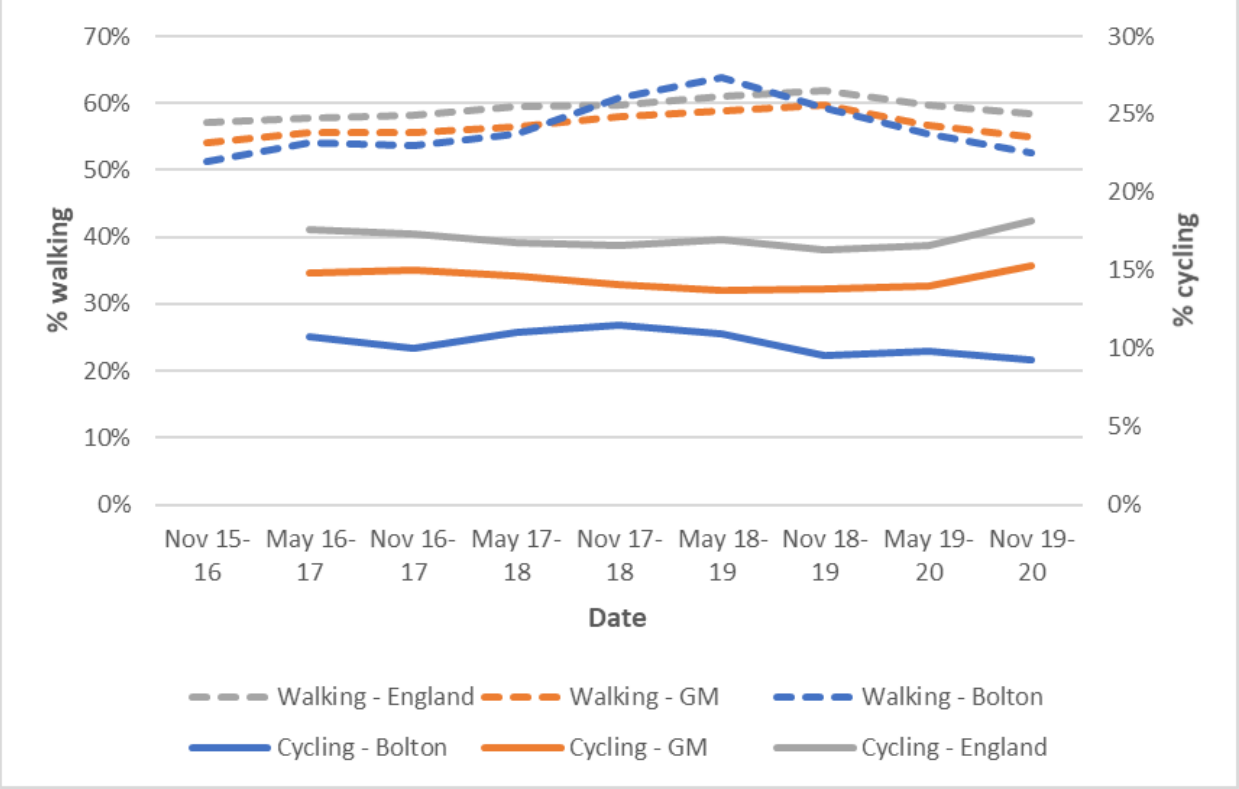
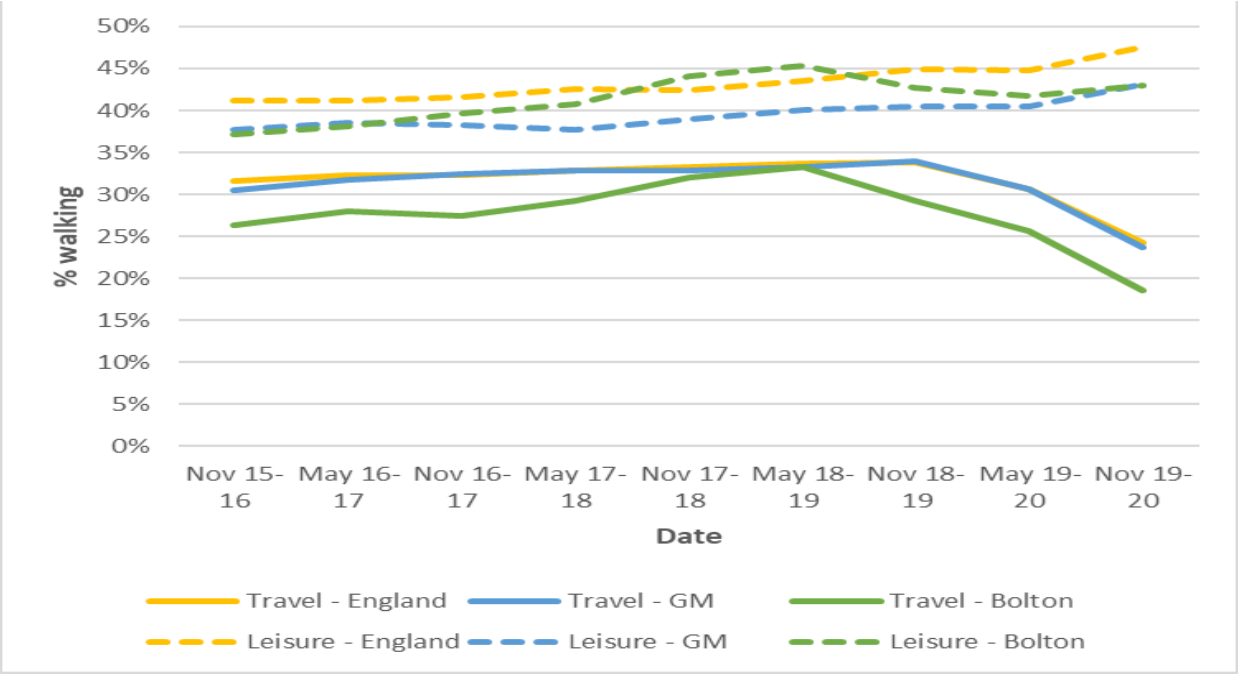


Figure 29. Walking at least once in the previous 28 days by purpose [186] *pandemic time is included in waves May 2019-20 & Nov 2019-20.*

[185] Sport England (2021). Active Lives.. https://bit.ly/3d00n9Q. Note: each time point contains data for a 12 month period starting in May and November.
[186] Sport England (2021). Active Lives.. https://bit.ly/3d00n9Q. Note: each time point contains data for a 12 month period starting in May and November.



Nature and greenspace

Access to green space plays an important role in people's health and wellbeing and it can act as a buffer against stressful life experiences. Individuals expressed a great need for spending time in urban green spaces during the pandemic, and that they were seen as places of solace and respite as well as for exercise and relaxation; visits to urban green spaces were missed the most in countries with the most severe restrictions. During the height of the first Covid-19 outbreak, a private garden had a greater health protective effect where the nearest green space was perceived to be more than a 10-minute walk away, showing that a private garden can partly compensate for a lack of access to public green space, but also that in times of crisis nearby public green spaces are particularly important for households without private gardens, however both types of greenspace were found to be an important resource for health and wellbeing irrespective of people's socio-demographic background.[187]

There are inequalities in access to public and private greenspace across Bolton with likely impact on residents' health and wellbeing. In Bolton, the MSOA (a medium sized administrative geography) with the lowest access to private outdoor space is Central Bolton (33% do not have any access), which also has a high proportion of accommodation in flats or apartments (62%). Rumworth North, Springfield and Great Lever, and Eagley

[187] Poorting W, Bird N, Hallingberg B, Phillips R, Williams D. (2021). The role of perceived public and private green space in subjective health and wellbeing during and after the first peak of the COVID-19 outbreak. *Landscape and Urban Planning, 211*, 104092. https://bit.ly/3AYbUAl

and Sharples also have over 15% of properties with no private outdoor space. In Gilnow and Victory, Halliwell and Brownlow Fold, and Rumworth South houses have the smallest average private outdoor space, all at less than 50m^2 on average.[188] These areas have substantial amounts of smaller terraced housing. Public parks and playing fields are available in many of these areas in Bolton, with LSOAs (a small administrative geography) within Horwich East most likely to have an average distance to a park or playing field that exceeded ten minutes' walk.[189] Public green and blue spaces are an asset for the whole community (blue spaces include riverside and lakeside locations), particularly in areas with smaller housing stock without access to private greenspace, which are often among the more deprived areas. There is a strong legacy of public parks and gardens in many of our older residential areas, we should ensure that this is maintained and planned and natural green and blue spaces continue to be valued as our residential areas expand.

Vaccination

Covid vaccination is at the forefront of the UK's response to the pandemic, reducing the risk of getting seriously ill or dying from Covid, reducing the risk of catching or spreading Covid, and protecting against COVID-19 variants.[190] It is therefore important that all residents are able to access and confidently take up vaccination, not least because of inequalities in risk of exposure to Covid, and in risk of subsequent potential severe illness and death.

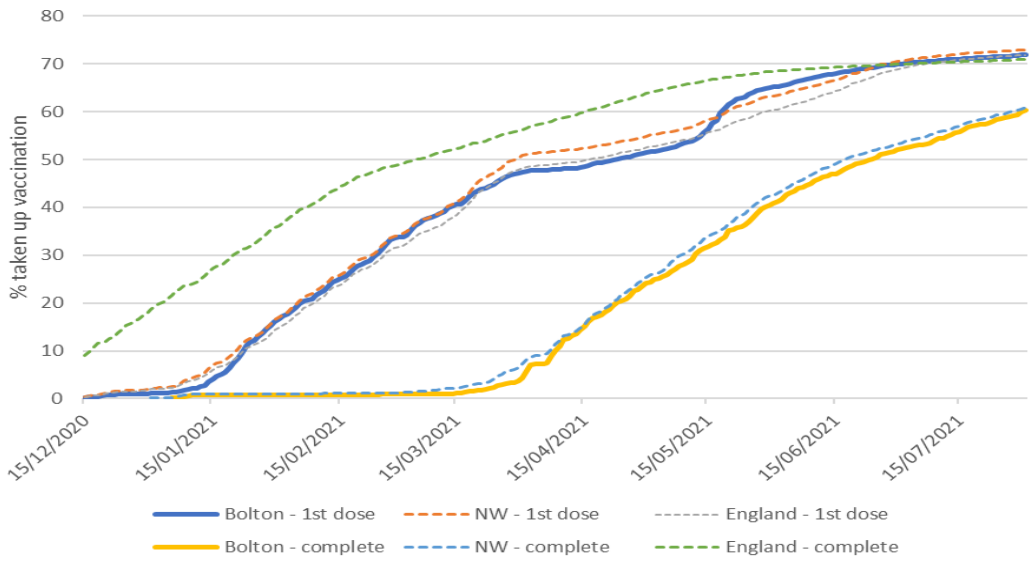
The UK Covid vaccination programme saw the first vaccinations administered in December 2020 and the first vaccine administered in Bolton was on 15 December 2020. Since then, over 46.3 million in the UK adult population have had a first dose administered up to the start of August 2021, and almost 42 million have received a second dose.[191] As of 31st July, 193,667 Bolton residents aged 12 and above had received a first dose, 162,249 had received a second dose[191]. Until August 2021, the vaccine was only routinely offered to persons aged 18 years and above. Although it was licensed for use on younger people with specific needs (such as certain health conditions or health and care workers) uptake numbers for younger age groups were low until routine rollout. Therefore, the young person's vaccination programme is out of the scope of this report, as is the

[188] ONS (2020). Access to garden space, Great Britain. https://bit.ly/3j25TfS
[189] ONS (2020). Access to public parks and playing fields, Great Britain. https://bit.ly/3j25TfS
[190] NHS (2021). *Coronavirus (COVID-19) vaccines*. https://bit.ly/3HG7Mcp
[191] UK government (2021). Coronavirus (COVID-19) in the UK dashboard: Vaccinations in the United Kingdom. https://bit.ly/3kI5E9h

booster programme. The data and intelligence presented here only refers to the adult vaccine programme and up to two doses.

In Bolton, over 190,000 first doses and over 160,000 second doses had been administered by the start of August 2021, with first dose uptake over 95% in those aged 70 and over (Figure 30).[192] Initial doses were offered to government-defined priority groups, including older people, care home residents and staff, healthcare staff and individuals who were clinically vulnerable. Over the following months the vaccine programme in the UK was expanded to progressively younger age groups.[193] Vaccination data in the UK has shown that vaccines are likely effective in preventing symptomatic Covid-19 infection in up to 70% of cases, and additional protection is conferred after a second dose has been given.[194] Evidence is also growing to suggest that transmission of Covid-19 is also reduced by the current vaccinations[194].

Figure 30. Cumulative vaccination uptake in Bolton compared with North West and England [195] (2 doses, age 12+ December 2020 to July 2021)

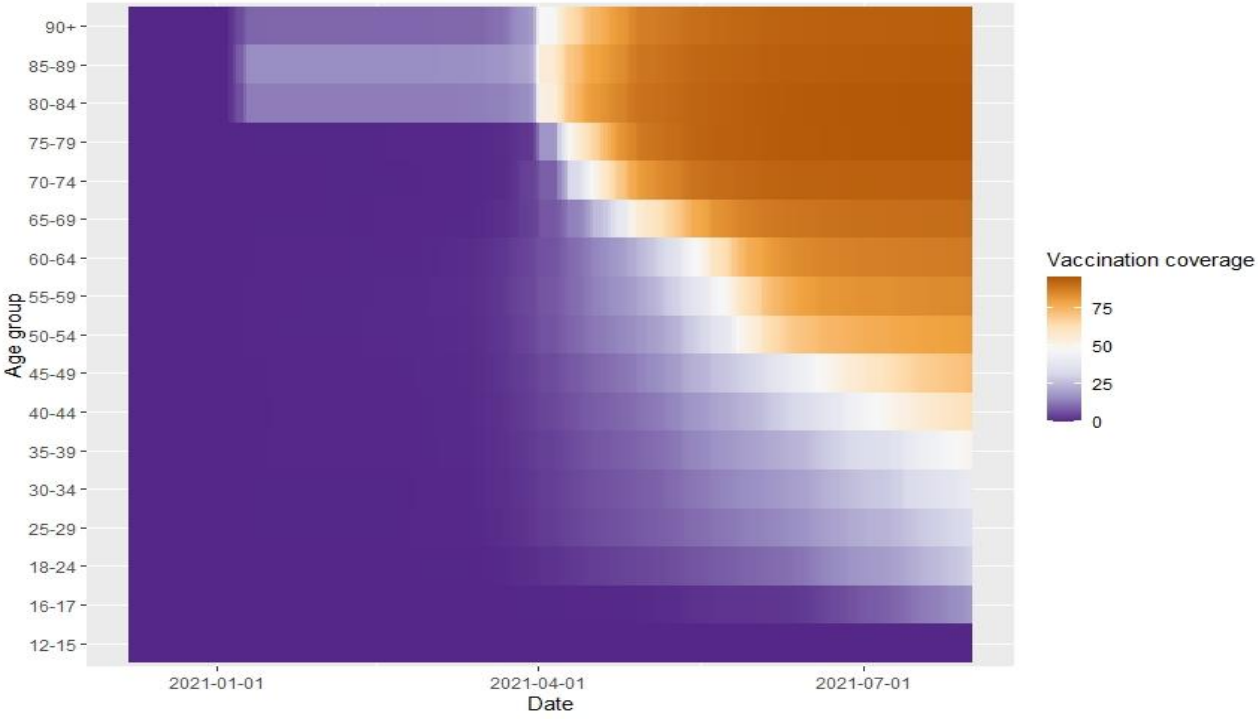


Vaccine coverage has been highest amongst the older population, which is in line with the vaccination rollout programme timeframe. The speed of vaccine uptake has differed by age groups, with a sharp increase in uptake in adults aged over 45, but a slower, more

[192] UK government (2021). Coronavirus (COVID-19) in the UK dashboard: Vaccinations in Bolton. https://bit.ly/3mPrD0H
[193] Department of Health and Social Care. (2021). *UK COVID-19 vaccines delivery plan 13/1/2021*. https://bit.ly/3mTBgLN
[194] Public Health England. (2021). *COVID-19 vaccine surveillance reports: Week 33*. https://bit.ly/3BtgC9u
[195] UK Government. (2021). Coronavirus (Covid-19) in the UK dashboard 23/11/21.

gradual uptake amongst adults aged under 45 in the UK[196]. A similar pattern has been seen among Bolton residents (Figure 31).

Figure 31. Vaccination uptake in Bolton by vaccination date and age as of 01/09/2021 [196] *Total number of people who have received 2 doses of COVID-19 vaccination at least 21 days apart. Data are shown by the date the second dose vaccination was given.*



Reasons for slower uptake of vaccinations are many and varied. However, vaccine hesitancy (where an individual reports themselves as being unlikely to take up a vaccine if it was offered) poses a significant barrier to vaccination against Covid-19, with at least 1 in 10 reporting hesitancy in the UK. Worries about side effects, and safety concerns surrounding the vaccines have been reported to be the two biggest reasons for vaccine hesitancy within Greater Manchester. As the proportion of the population that is unvaccinated decreases as the vaccine rollout programme continues, the proportion of vaccine hesitant individuals within the unvaccinated population is rising, as expected. Confusion surrounding information about the vaccines is rising, as a reason for vaccine hesitancy within Greater Manchester.[197] Other similar themes to those identified nationally have been seen in the Greater Manchester Covid Survey. [198] It is important to take into account national and local research to ensure as many Bolton residents as possible can benefit from vaccination.

[196] UK government (2021). Coronavirus (COVID-19) in the UK dashboard. "cumVaccinationCompleteCoverageByVaccinationDatePercentage" https://bit.ly/2WwtFYr
[197] Greater Manchester Combined Authority (2021). Safely managing Covid-19: Greater Manchester Population Survey, Survey 7 report. https://bit.ly/319Q3Kc
[198] GMCA (2012).Safely managing Covid-19: Greater Manchester Population Survey, Survey 9 report. https://bit.ly/3loYWGi

The highest vaccine hesitancy rates are reported in individuals aged 16-25 years old.[199] Young women (16 to 29) are more likely than young men to express vaccine hesitancy[200], but overall rates of hesitancy between men and women are equal (4%)[199].

Higher rates of vaccine hesitancy have been reported in Black adults (18%) compared to White adults (4%) and hesitancy is also higher in adults identifying as Muslim (15%) when compared to those identifying as Christian (3%)[199]. In the UK, 94% of White adults have had their first vaccine, compared to 67% of Black Caribbean and 78% of Pakistani adults.[201] Bolton trends are lower overall with 83.5% of White British, 66.3% of Black or Black British Caribbean and 74% of Asian Pakistani adults having had their first vaccine[202]. Vaccine confidence remains low in certain ethnic minority groups, with poorer vaccine uptake amongst these groups thought to be due to misinformation, low vaccine sentiment, increased stigma, and language barriers reducing access to vaccinations. [203]

Lower vaccination rates have been reported amongst disabled compared to non-disabled adults. This difference is highest amongst those aged 50-69 compared to those aged over 70.[204] 20% of the Bolton population have a long term health condition or disability which limits their day to day activities a little or a lot; so are considered to be disabled under the Equality Act[205]. This proportion increases with age, 30% of those aged 55-59 are disabled, reaching 50% by age 70-74[206].

Deprivation has also been shown to be a factor in vaccine hesitancy, with adults living in more deprived areas reporting higher hesitancy (8%), compared to those living in less deprived areas (3%).[207] Lower take up rates are also reflected in Bolton figures which show that only 69% those residing in the most deprived localities have had their first vaccination compared to 89% of residents who live in the most affluent areas of the borough[168].

---

[199] ONS (2021). *Coronavirus and vaccine hesitancy, Great Britain: 26 May to 20 June 2021*. https://bit.ly/3kCCvwk
[200] ONS. (2021). *Differential impacts of the Coronavirus pandemic on men and women*. https://bit.ly/3CZz9fi
[201] The Health Foundation. (2021). *Unequal pandemic, fairer recovery: the COVID-19 impact enquiry report*. https://bit.ly/3gew0hL
[202] GM Tableau (2021) Covid-19 response
[203] HM Government. (2021). *Third quarterly report on progress to address COVID-19 health inequalities*. https://bit.ly/3iYA3Rj
[204] Coronavirus and vaccination rates in people aged 50 years and over by socio-demographic characteristic, England - Office for National Statistics (ons.gov.uk)
[205] Bolton Council (2021). *Bolton JSNA: Equality Characteristics*. https://bit.ly/30q5kWN
[206] Nomis. (2011). *Census 2011: table LC3101EWls - Long term health problem or disability by sex by age*. https://bit.ly/31VdXZL
[207] Coronavirus and vaccine hesitancy, Great Britain - Office for National Statistics (ons.gov.uk)

Many of these groups experiencing lower vaccination uptake both nationally and in Bolton, and vaccine hesitancy from national data have also experienced increased exposure to Covid 19, or increased risk of negative consequences from infection (as described earlier in this report). Many people from these groups are among the Bolton population. This makes addressing vaccine hesitancy particularly important. In Bolton, we have been engaging with minority groups in order to understand and address the reasons for vaccine hesitancy and therefore reduce any misinformation and inaccuracies.

Bolton's Covid response to the Variants of Concern (April – June 2021)

During May 2021 Bolton saw a huge surge in the number of COVID-19 cases associated with the Delta variant, and there was a need to roll out surge testing and surge vaccination programme at scale across the borough. In late April 2021, cases of a Variant of Concern (VOC) were identified, and a targeted programme was developed to locate further cases. This was focussed on increasing engagement with the community enhancing testing via schools and workplace locations. On 3 May 2021 Bolton Council were notified of another Variant Under Investigation, which soon became a VOC in the same geographical area as the other VOC. Therefore, the existing response to the original VOC was rapidly scaled up and implemented with the aim of undertaking:

- Surge testing
- Enhanced contact tracing
- Providing additional isolation support
- Surge vaccinations
- Whilst also enhancing community partnerships through a comprehensive engagement plan.

Through this intense period of time, all partners came together, as our rates peaked at 452.0 cases per 100 000 as of 21 May 2021[208] which was significantly higher than the rest of the North West and England as a whole, which were seeing rates of 50.4 and 23.1 respectively. Local people responded to the call for action and a social movement was born. Additional support via national surge response team and the army were brought to Bolton to work side-by-side with our local communities. Teams of resident volunteers worked alongside military personnel, services and local businesses, to become our 'boots

[208] Interactive map: coronavirus in the UK. GovUK. (Accessed 19 May 2021) https://bit.ly/3ALaMPY

on the ground' through door-knocking and leafleting, encouraging as many people as possible to come forward for testing and vaccination. People came together in their droves to be tested, engaged with our Test and Trace team, and came forward to be vaccinated and receive the support that they needed.

Recent evaluation carried out on the targeted response found that there was an overall positive impact of the programme both in terms of preventing possible further increases in case rates but also improved engagement with the community. Detailed analyses found that through enhanced engagement, testing, isolation and vaccination, up to 4,000 cases may have been prevented therefore interrupting the upward trend that had been seen. It was also suggested that the programme's activities helped slow subsequent increases throughout July 2021.

In terms of testing, the proportion of Bolton residents that had had at least one PCR test increased during June 2021. This increase was directly attributed to the associated communications and community engagement activities which successfully encouraged some people who had not had a PCR to get tested therefore reflecting successful community engagement.

Positive impacts were also seen with regards to vaccinations where it was found that there was a clear increase in people who had their first dose of the vaccine during the surge intervention. Specifically, on the 18th May, Bolton recorded the highest number of daily doses administered since the vaccination programme began. The approach was used as a good example for other Local Authorities to deliver surge in the future. Elsewhere in this report (from page 59) we discuss its longer lasting legacy.

Recommendations

1. Covid-19 and the mitigations took its toll on all of mental health and wellbeing; whether this is because of the virus itself or the impact of the mitigations, with many people re-evaluating their work/life balance and priorities. It is important that we support and nurture our fatigued workforce across Bolton, enable agile, encourage more cycling and walking to and from work and whilst in work, and have greater flexibility to respond to caring needs, so that we get the best out of people and have a happy, positive and successful workforce.

2. Bolton's response was incredible. We need to build on our success and continue to have new conversations with our communities; to have a sense of purpose and pride and strengthen our assets and enable power to be given to the people of Bolton.

3. Children and young people have been disproportionately affected by COVID-19, particularly by the consequences of managing COVID-19. We need to ensure that the voice of children and young people are at the front of all of our strategy and policies across Bolton.

4. Older people, people with disability and people who have more vulnerabilities have been disproportionately affected by Covid-19, particularly from both the virus itself and, the impact of the management of Covid-19. We need to ensure that we have a health and social care integrated system that can respond, including a sustainable workforce, a stronger communities offer and shift in resources to more up-stream prevention thereby enabling people to live for longer within their own homes, with appropriate levels of support.

5. Businesses have recognised the need for a sustainable and productive workforce, more so than ever, which enables a strong economy. It is important that we support businesses across the Borough so that they can address health inequalities and build a sustainable workforce, regardless of business sector.

6. There are key elements of learning from our Covid response that can be applied to our local response to other challenges such as the climate emergency where we also see direct and indirect impacts fall disproportionately on disadvantaged communities.

Incorporating action on inequalities across the Marmot objectives and Bolton's Vision objectives with climate change action will together help us build back fairer and greener.